CDX-4000X/4005/4800X

SERVICE MANUAL

US Model
Canadian Model
CDX-4000X/4005
E Model
CDX-4800X

Photo: CDX-4000X

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-383Z-121//K
Optical Pick-up Name	KSS-720A

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US Model)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
19 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1% total harmonic distortion.

Other Specifications

CD player section

System	Compact disc digital audio system
Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit
Laser Diode Properties (CDX-4000X/4005)	
Material	GaAlAs
Wavelength	780 nm
Emission Duration	Continuous
Laser output power	Less than 44.6 µW*

* *This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.*

Tuner section

FM

Tuning range	CDX-4000X/4005: 87.5 – 107.9 MHz CDX-4800X: FM tuning interval: 50 kHz/200 kHz switchable 87.5 – 108 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	66 dB (stereo), 72 dB (mono)
Harmonic distortion at 1 kHz	0.6% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM

Tuning range	CDX-4000X/4005: 530 – 1,710 kHz CDX-4800X: AM tuning interval: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	50 W × 4 (at 4 ohms)

– Continued on next page –

FM/AM COMPACT DISC PLAYER

MICROFILM

SONY®

General

Outputs	Audio outputs Power antenna relay control lead Power amplifier control lead Telephone ATT control lead
Tone controls	Bass ±9 dB at 100 Hz Treble ±9 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 183 mm (7 1/8 × 2 × 7 1/4 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 162 mm (7 1/4 × 2 1/8 × 6 1/2 in.) (w/h/d)
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

SERVICE NOTE

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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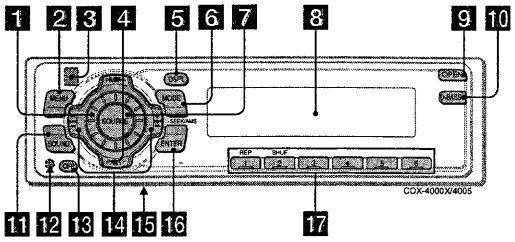
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1
GENERAL

This section is extracted from CDX-4000X/4005's instruction manual.

Location of controls



Refer to the pages listed for details.

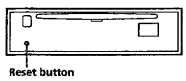
1 **Volume control dial**
2 **MENU button** 7, 9, 10, 11, 12, 13, 16
3 **⏏ (eject) button (located on the front side of the unit behind the front panel)** 8
4 **DISC/PRST +/– (cursor up/down) buttons** 7, 9, 10, 11, 12, 13, 16
During radio reception: Preset stations select 11
5 **DSPL (display mode change) button** 8, 9, 13
6 **MODE button**
During radio reception: BAND select 10
7 **SOURCE (TUNER/CD) button** 7, 8, 9, 10, 11
8 **Display window**
9 **OPEN button** 6, 8, 17
10 **D-BASS button** 16
11 **SOUND button** 15
12 **Reset button (located on the front side of the unit behind the front panel)** 6
13 **OFF button***1 6, 7, 8
14 **SEEK/AMS –/+ (cursor left/right) buttons** 7, 9, 11, 12, 15, 16
Automatic Music Sensor 9
Manual Search 9
Seek 11
15 **Frequency select switch (located on the bottom of the unit)***2
The AM (FM) tuning interval is factory-set to the 10 k (200 k) position. Make sure that the 9 k (50 k) position is selected.
16 **ENTER button** 7, 9, 10, 11, 12, 13, 16
17 **Number buttons**
During radio reception: Preset number select 11
During CD playback: ① REP 10 ② SHUF 10

*1 **Warning when installing in a car without ACC (accessory) position on the ignition key switch**
Be sure to press (OFF) on the unit for two seconds to turn off the clock display after turning off the engine.
When you press (OFF) momentarily, the clock display does not turn off and this causes battery wear.
*2 *CDX-4005 only*

Getting Started

Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.
Remove the front pannel and press the reset button with a pointed object, such as a ball-point pen.



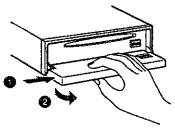
Note
Pressing the reset button will erase the clock setting and some memorized functions such as the station memo.

Detaching the front panel

You can detach the front panel of this unit to protect the unit from being stolen.

1 Press (OFF).

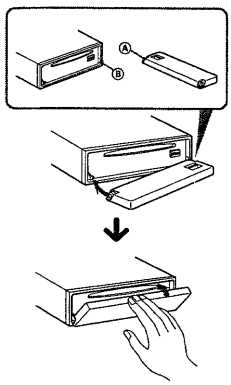
2 **Press (OPEN), then slide the front panel to the right side, and pull out the left side of the front panel.**



Notes
- *Do not put anything on the inner surface of the front panel.*
- *Be sure not to drop the panel when detaching it from the unit.*
- *If you detach the panel while the unit is still turned on, the power will turn off automatically to prevent the speakers from being damaged.*
- *When carrying the front panel with you, use the supplied front panel case.*

Attaching the front panel

Place the hole Ⓐ in the front panel onto the spindle Ⓑ on the unit as illustrated, then push the left side in.



Notes
- *Be careful not to attach the front panel upside down.*
- *Do not press the front panel too hard against the unit when attaching it.*
- *Do not press too hard or put excessive pressure on the display window of the front panel.*
- *Do not expose the front panel to direct sunlight or heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight or where there may be a considerable rise in temperature.*

Caution alarm

If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds.
If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.

Turning the unit on/off

Turning on the unit

Press (SOURCE) or insert a CD in the unit. For details on operation, refer to page 8 (CD player) and page 10 (radio).

Turning off the unit

Press (OFF) to stop CD/MD playback or FM/AM reception (the key illumination and display remain on).
Press (OFF) for two seconds to completely turn the unit off.

Note
If your car has no ACC position on the ignition key switch, be sure to turn the unit off by pressing (OFF) for two seconds to avoid car battery wear.

How to use the menu

This unit is operated by selecting items from a menu.
To select, first enter the menu mode and choose up/down ((+)/(–) of (PRST)), or choose left/right ((–)/(+) of (SEEK/AMS)).

(PRST)

(+): to select upwards

(–): to select downwards

(SEEK/AMS)

(–): to select leftwards

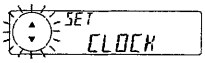
(+): to select rightwards

Setting the clock

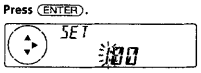
The clock uses a 12-hour digital indication.

Example: To set the clock to 10:08

1 **Press (MENU), then press either side of (PRST) repeatedly until "CLOCK" appears.**



❶ **Press (ENTER).**



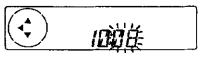
The hour indication flashes.

❷ **Press either side of (PRST) to set the hour.**

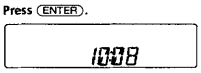
❸ **Press (+) side of (SEEK/AMS).**

The minute indication flashes.

❹ **Press either side of (PRST) to set the minute.**



2 **Press (ENTER).**



The clock starts.

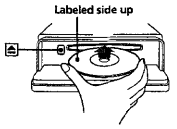
After the clock setting is completed, the display returns to normal play mode.

Note
In the initial setting, the clock indication appears while the unit is turned off.
When the D.INFO mode is set to ON, the time is always displayed (page 16).

CD Player

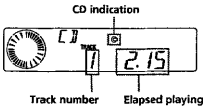
Listening to a CD

1 **Press (OPEN) and insert the CD.**



2 **Close the front panel.**
Playback starts automatically.

If a CD is already inserted, press (SOURCE) repeatedly until "CD" appears to start playback.



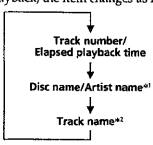
When the last track on the CD is over

The track number indication returns to "1," and playback restarts from the first track of the CD.

To	Press
Stop playback	(OFF)
Eject the CD	(OPEN) then ⏏

Changing the display item

Each time you press (DSPL) during CD TEXT disc playback, the item changes as follows:



*1 *If you play a CD TEXT disc, the artist name appears in the display after the disc name. (Only for CD TEXT discs with the artist name.)*
*2 *If the track name of a CD TEXT disc is not prerecorded, "TRACK" and "NO NAME" appear in the display.*

After you select the desired item, the display will automatically change to the Motion Display mode after a few seconds.
In the Motion Display mode, all the items are scrolled in the display one by one in order.

Tip
The Motion Display mode can be turned off. (See "Changing the sound and display settings" on page 16.)

Automatically scrolling a disc name — Auto Scroll

If the disc name, artist name, or track name on a CD TEXT disc exceeds eight characters and the Auto Scroll function is on, information automatically scrolls across the display as follows:

- *The disc name appears when the disc has changed (If the disc name is selected as the display item).*
- *The track name appears when the track has changed (If the track name is selected as the display item).*
- *The disc or track name appears depending on the setting when you press (SOURCE) to select CD TEXT disc.*

If you press (DSPL) to change the display item, the disc or track name of the CD TEXT disc is scrolled automatically whether you set the function on or off.

1 During playback, press (MENU).

2 Press either side of (PRST) repeatedly until "A.SCRL-OFF" appears.

3 Press the (+) side of (SEEK/AMS) to select "A.SCRL-ON."

4 Press (ENTER).

To cancel Auto Scroll, select "A.SCRL-OFF" in step 3.

Note

For some CD TEXT discs with very many characters, the following cases may happen:
— Some of the characters are not displayed.
— Auto Scroll does not work.

Locating a specific track — Automatic Music Sensor (AMS)

During playback, press either side of (SEEK/AMS) momentarily for each track you want to skip.

Locating a specific point in a track — Manual Search

During playback, press and hold either side of (SEEK/AMS). Release when you have found the desired point.

Note

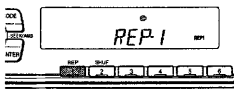
If "└└ └└" or "┐┌ ┐┌" appears in the display, you have reached the beginning or the end of the disc and you cannot go any further.

Playing a CD in various modes

You can play CDs in various modes:
- REP (Repeat Play) repeats the current track.
- SHUF (Shuffle Play) plays all the tracks in random order.

Playing tracks repeatedly — Repeat Play

During playback, press (1) (REP).

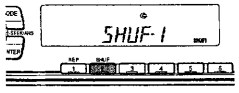


Repeat Play starts.

To return to normal play mode, select "REP-OFF."

Playing tracks in random order — Shuffle Play

During playback, press (2) (SHUF).



Shuffle Play starts.

To return to normal play mode, select "SHUF-OFF."

Radio

Memorizing stations automatically

— Best Tuning Memory (BTM)

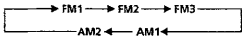
The unit selects the stations with the strongest signals and memorizes them in the order of their frequencies. You can store up to 6 stations on each band (FM1, FM2, FM3, AM1, and AM2).

Caution

When tuning in stations while driving, use Best Tuning Memory to prevent accidents.

1 Press (SOURCE) repeatedly to select the tuner.
Each time you press (SOURCE), the source changes as follows:
Tuner ↔ CD

2 Press (MODE) repeatedly to select the band.
Each time you press (MODE), the band changes as follows:



3 Press (MENU), then press either side of (PRST) repeatedly until "BTM" appears.

4 Press (ENTER).
The unit stores stations in the order of their frequencies on the number buttons.
A beep sounds when the setting is stored.

Notes

- *The unit does not store stations with weak signals. If only a few stations can be received, some number buttons will retain their former setting.*
- *When a number is indicated in the display, the unit starts storing stations from the one currently displayed.*
- *If a CD is not in the unit, only the tuner band appears even if you press (SOURCE).*

Memorizing only the desired stations

You can preset up to 18 FM stations (6 each for FM1, FM2, and FM3), up to 12 AM stations (6 each for AM1 and AM2) in the order of your choice.

1 Press (SOURCE) repeatedly to select the tuner.

2 Press (MODE) repeatedly to select the band.

3 Press either side of (SEEK/AMS) to tune in the station that you want to store on the number button.

4 Press the desired number button ((1) to (6)) for two seconds until "MEM" appears.
The number button indication appears in the display.

Note

If you try to store another station on the same number button, the previously stored station will be erased.

Receiving the memorized stations

1 Press (SOURCE) repeatedly to select the tuner.

2 Press (MODE) repeatedly to select the band.

3 Press the number button ((1) to (6)) on which the desired station is stored.

Tip

Press either side of (PRST) to receive the stations in the order they are stored in the memory (Preset Search Function).

If you cannot tune in a preset station

Press either side of (SEEK/AMS) to search for the station (automatic tuning).
Scanning stops when the unit receives a station. Press either side of (SEEK/AMS) repeatedly until the desired station is received.

Note

If the automatic tuning stops too frequently, press (MENU), then press either side of (PRST) repeatedly until "LOCAL" (local seek mode) is displayed. Then press the (+) side of (SEEK/AMS) to select "LOCAL-ON." Press (ENTER).
Only the stations with relatively strong signals will be tuned in.

Tips

- *When you select the "LOCAL-ON" setting, "L.SEEK" appears while the unit is searching for a station.*
- *If you know the frequency of the station you want to listen to, press and hold either side of (SEEK/AMS) until the desired frequency appears (manual tuning).*

If FM stereo reception is poor — Monaural Mode

1 During radio reception, press (MENU), then press either side of (PRST) repeatedly until "MONO-OFF" appears.

2 Press the (+) side of (SEEK/AMS) until "MONO-ON" appears.
The sound improves, but becomes monaural ("ST" disappears).

3 Press (ENTER).

To return to normal mode, select "MONO-OFF" in step 2.

Automatical reception frequency adjustment — IF AUTO function

If interference occurs, the "IF AUTO" function of this unit will automatically avoid noise and narrow the reception frequency. In such cases, some FM stereo broadcasts may become monaural. If you would like to hear such broadcasts in stereo, manually switch to the "WIDE" setting.

1 During radio reception, press (MENU), then press either side of (PRST) repeatedly until "IF AUTO" appears.

2 Press the (+) side of (SEEK/AMS) until "WIDE" appears.

3 Press (ENTER).

Note

When you widen the frequency signal reception setting ("WIDE" mode), some interference may occur.

Storing the station names

— Station Memo

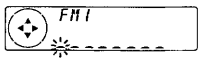
You can assign a name to each radio station and store it in memory. The name of the station currently tuned in appears in the display. You can assign a name of up to eight characters for a station.

Storing the station names

1 Tune in a station whose name you want to store.

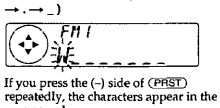
2 Press (MENU), then press either side of (PRST) repeatedly until "NAME EDIT" appears.

3 Press (ENTER).



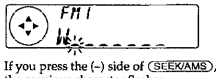
4 Enter the characters.

❶ Press the (+) side of (PRST) repeatedly to select the desired characters.
(A → B → C → ··· Z → 0 → 1 → 2 → ··· 9 → + → - → * → / → \ → > → < → . → _)



If you press the (–) side of (PRST) repeatedly, the characters appear in the reverse order.
If you want to put a blank space between characters, select "_" (underbar).

❷ Press the (+) side of (SEEK/AMS) after locating the desired character.
The next character flashes.



If you press the (–) side of (SEEK/AMS), the previous character flashes.

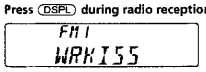
❸ Repeat steps ❶ and ❷ to enter the entire name.

5 To return to the normal radio reception, press (ENTER).

Tip
To erase or correct a name, enter "_" (under-bar) for each character.

Displaying the station name

Press (DSPL) during radio reception.



Each time you press (DSPL), the item changes as follows:

Station name* ⟷ Frequency

** If the station name of a station is not stored, "NO NAME" appears in the display for one second.*

Erasing the station name

1 Tune in a station whose name you want to erase.

2 Press (MENU), then press either side of (PRST) repeatedly until "NAME DEL" appears.

3 Press (ENTER).

4 Press (ENTER) for two seconds.
The name is erased.
Repeat steps 1 through 4 if you want to erase other names.

5 Press (MENU) twice.
The unit returns to the normal radio reception mode.

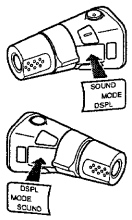
Note
When you erase all of the station names, "NO NAME" appears in step 4.

Other Functions

You can also control the unit with a rotary commander.

Labeling the rotary commander

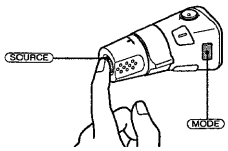
Depending on how you mount the rotary commander, attach the appropriate label as shown in the illustration below.



Using the rotary commander

The rotary commander works by pressing buttons and/or rotating controls.

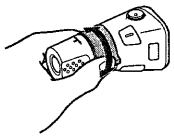
By pressing buttons (the SOURCE and MODE buttons)



Each time you press (SOURCE), the source changes as follows:
Tuner → CD

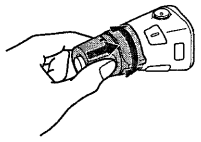
Pressing (MODE) changes the operation in the following ways:
Tuner: FM1 → FM2 → FM3 → AM1 → AM2

By rotating the control (the SEEK/AMS control)



Rotate the control momentarily and release it to:
- Locate a specific track on a disc. Rotate and hold the control until you locate the specific point in a track, then release it to start playback.
- Tune in stations automatically. Rotate and hold the control to find a specific station.

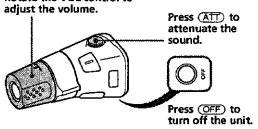
By pushing in and rotating the control (the PRESET/DISC control)

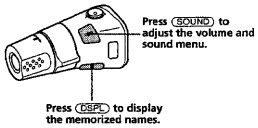


Push in and rotate the control to:
- Receive the stations memorized on the number buttons.

Other operations

Rotate the VOL control to adjust the volume.

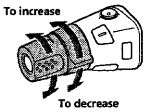




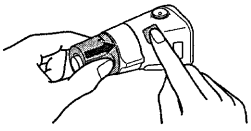
Tip
If your car has no ACC (accessory) position on the ignition key switch, be sure to press (OFF) for two seconds to turn off the clock indication after turning off the engine.

Changing the operative direction

The operative direction of controls is factory-set as shown below.



If you need to mount the rotary commander on the right hand side of the steering column, you can reverse the operative direction.



Press (SOUND) for two seconds while pushing the VOL control.

Tip
You can also change the operative direction of these controls with the unit (see "Changing the sound and display settings" on page 16).

Adjusting the sound characteristics

You can adjust the bass, treble, balance, and fader.
You can store the bass and treble levels independently for each source.

1 Select the item you want to adjust by pressing (SOUND) repeatedly.
Each time you press (SOUND), the item changes as follows:
BAS (bass) → TRE (treble) → BAL (left-right) → FAD (front-rear)

2 Adjust the selected item by pressing either side of (SEEK/AMS).
When adjusting with the rotary commander, press (SOUND) and rotate the VOL control.

Note
Adjust within three seconds after selecting the item.

Attenuating the sound

Press (ATT) on the rotary commander.
"ATT-ON" flashes momentarily.

To restore the previous volume level, press (ATT) again.

Tip
When the interface cable of a car telephone is connected to the ATT lead, the unit decreases the volume automatically when a telephone call comes in (Telephone ATT function).

Changing the sound and display settings

The following items can be set:

SET (setting)
- CLOCK (page 8)
- BEEP — to turn the beeps on or off.
- RM (Rotary Commander) — to change the operative direction of the controls of the rotary commander.
  — Select "NORM" to use the rotary commander as the factory-set position.
  — Select "REV" when you mount the rotary commander on the right side of the steering column.

DIS (display)
- D.INFO (Dual Information) — to display the clock and the play mode at the same time (ON).
- M.DSPL (Motion Display) — to turn the motion display on or off.
- A.SCRL (Auto Scroll) (page 10)

Note
If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be disabled.

1 Press (MENU).

2 Press either side of (PRST) repeatedly until the desired item appears.
Each time you press the (–) side of (PRST), the item changes as follows:
CLOCK → BEEP → RM → D.INFO → M.DSPL → A.SCRL

Note
The displayed item will differ depending on the source.

Tip
You can easily switch among categories ("SET", "DIS", "PIM" (play mode), and "EDT" (edit mode)) by pressing either side of (PRST) for two seconds.

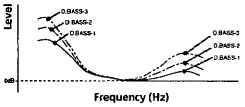
3 Press the (+) side of (SEEK/AMS) to select the desired setting (Example: ON or OFF).

4 Press (ENTER).
After the mode setting is complete, the display returns to normal play mode.

Boosting the bass sound

— D-bass

You can enjoy a clear and powerful bass sound.
The D-bass function boosts the low and high frequency signal with a sharper curve than conventional bass boost.
You can hear the bass line more clearly even while the vocal volume remains the same. You can emphasize and adjust the bass sound easily with the D-BASS control.



Adjusting the bass curve

Press (D-BASS) repeatedly until the desired bass level (1, 2, or 3) appears in the display.

To cancel, select "D.BASS-OFF."

Note
If the bass sound becomes distorted, select a less effective setting of "D.BASS" or adjust the volume.

Connections

Cautions

- This unit is designed for negative earth 12 V DC operation only.
- Be careful not to pinch any wires between the screw and the body of the car, or this unit, or between any moving parts such as the seat railing, etc.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- **Run all ground wires to a common earth surface.**
- Connect the yellow cord to a free car circuit rated higher than the unit's fuse rating. If you connect this unit in series with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual component's fuse rating. If there are no car circuits rated as high as the unit's fuse rating, connect the unit directly to the battery. If no car circuits are available for connecting this unit, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.
- The use of optical instruments with this product will increase eye hazard.

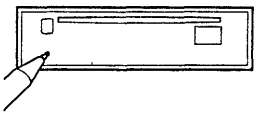
Warning when installing in a car without ACC (accessory) position on the ignition key switch

Be sure to press (OFF) on the unit for two seconds to turn off the clock display after turning off the engine.

When you press (OFF) only momentarily, the clock display does not turn off and this causes battery wear.

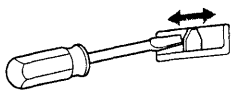
Reset button

When the installation and connections are completed, be sure to press the reset button with a ball-point pen, etc.



Frequency select switch (CDX-C4005 only)

The AM (FM) tuning interval is factory-set to the 10 K (200 K) position.
Make sure that the swich on the bottom of the unit is set to the 9 K (50 K) position before making connections.



Note
When you change the position of the switch to the 9 K (50 K) position, be sure to press the reset buttons after the connections are completed.

Connexions

Précautions

- Cet appareil est conçu pour fonctionner sur tension continue de 12 V avec masse négative.
- Veillez à ne coincer aucun fil entre la vis et la carrosserie ou cet appareil ou aucun élément mobile comme les glissières du siège, etc.
- Brancher les fils d'entrée d'alimentation **jaune** et **rouge** seulement après avoir terminé tous les autres branchements.
- Veiller à ne pas raccorder le fil rouge d'entrée d'alimentation à la borne positive de 12 V qui est alimentée quand la clé de contact est sur la position accessoires.
- **Rassembler tous les fils de terre en un point de masse commun.**
- Brancher le câble jaune à un circuit libre de la voiture dont la capacité nominale est supérieure à la capacité du fusible de l'appareil. Si vous branchez cet appareil en série avec d'autres composants stéréo, le circuit de la voiture auquel ils sont raccordés doit afficher une capacité nominale supérieure à la somme des capacités individuelles de chaque composant. S'il n'y a pas de circuits de voiture affichant une capacité égale à la capacité du fusible de l'appareil, brancher l'appareil directement à la batterie. Si aucun circuit de voiture n'est disponible pour connecter cet appareil, brancher l'appareil à un circuit de voiture supérieur à la capacité du fusible de l'appareil de telle sorte que si l'appareil grille son fusible, aucun autre circuit ne soit coupé.

Avertissement en cas d'installation dans une voiture dont le contact ne comporte pas de position ACC (accessoires)

Appuyez sur la touche (OFF) de l'appareil pendant deux secondes pour désactiver l'affichage de l'horloge après avoir coupé le moteur.

Lorsque vous appuyez brièvement sur (OFF), l'affichage de l'horloge ne s'éteint pas et cela provoque une usure de la batterie.

Touche de réinitialisation

Quand l'installation et les connexions sont terminées, appuyer sur la touche de réinitialisation avec un stylo bille ou un objet pointu.

Sélecteur de fréquence (CDX-C4005 seulement)

L'intervalle de syntonisation AM (FM) est réglé par défaut sur la position 10 k (200 k).
Assurez-vous que le sélecteur situé sur le dessous de l'appareil est réglé sur 9 K (50 K) avant d'établir les connexions.

Remarque
Lorsque vous amenez le sélecteur sur la position 9 K (50 K), n'oubliez pas d'appuyer sur les touches de réinitialisation après avoir terminé les connexions.

Connection diagram / Schémas de connexion

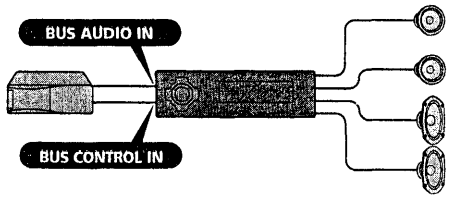
Equipment used in illustrations (not supplied)
Appareils utilisés dans les illustrations (non fournis)

Front speaker
Haut-parleur avant

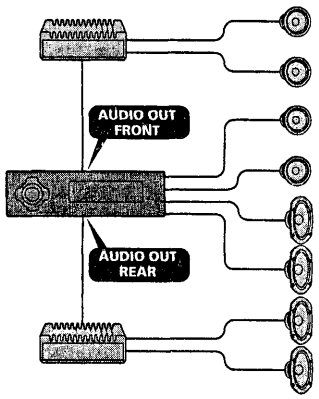
Rear speaker
Haut-parleur arrière

Power amplifier
Amplificateur de puissance

I



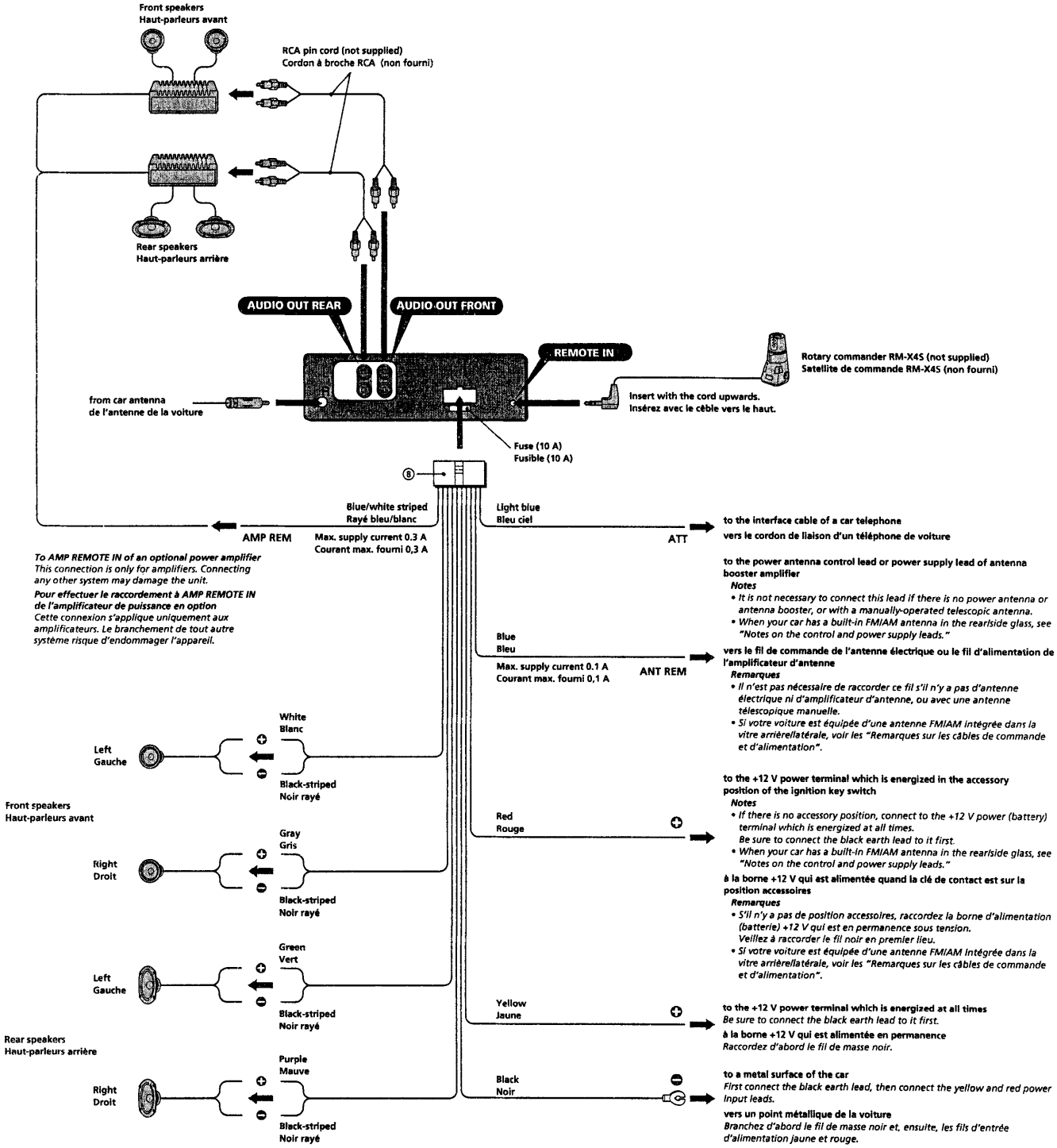
II



Notes
- *Be sure to connect the earth cord before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

Remarques
- *Raccordez d'abord le fil de masse avant de connecter l'amplificateur.*
- *Si vous raccordez un amplificateur de puissance et que vous n'utilisez pas l'amplificateur intégré, le bip sonore est désactivé.*

Connection example
Exemple de connection


Front speakers
Haut-parleurs avant
RCA pin cord (not supplied)
Cordon à broche RCA (non fourni)
Rear speakers
Haut-parleurs arrière
AUDIO OUT REAR
AUDIO OUT FRONT
REMOTE IN
Rotary commander RM-X4S (not supplied)
Satellite de commande RM-X4S (non fourni)
from car antenna
de l'antenne de la voiture
Insert with the cord upwards.
Insérez avec le câble vers le haut.
Fuse (10 A)
Fusible (10 A)
Blue/white striped
Rayé bleu/blanc
AMP REM
Max. supply current 0.3 A
Courant max. fourni 0,3 A
Light blue
Bleu ciel
ATT
to the interface cable of a car telephone
vers le cordon de liaison d'un téléphone de voiture
to the power antenna control lead or power supply lead of antenna booster amplifier
Notes
• It is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.
• When your car has a built-in FM/AM antenna in the rearside glass, see "Notes on the control and power supply leads."
Blue
Bleu
Max. supply current 0.1 A
Courant max. fourni 0,1 A
ANT REM
vers le fil de commande de l'antenne électrique ou le fil d'alimentation de l'amplificateur d'antenne
Remarques
• Il n'est pas nécessaire de raccorder ce fil s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.
• Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir les "Remarques sur les câbles de commande et d'alimentation".
To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.
Pour effectuer le raccordement à AMP REMOTE IN de l'amplificateur de puissance en option
Cette connexion s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.
White
Blanc
Left
Gauche
Black-striped
Noir rayé
Front speakers
Haut-parleurs avant
Gray
Gris
Right
Droit
Black-striped
Noir rayé
Red
Rouge
to the +12 V power terminal which is energized in the accessory position of the ignition key switch
Notes
• If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
Be sure to connect the black earth lead to it first.
• When your car has a built-in FM/AM antenna in the rearside glass, see "Notes on the control and power supply leads."
à la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires
Remarques
• S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est en permanence sous tension.
Veillez à raccorder le fil noir en premier lieu.
• Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir les "Remarques sur les câbles de commande et d'alimentation".
Green
Vert
Left
Gauche
Black-striped
Noir rayé
Yellow
Jaune
to the +12 V power terminal which is energized at all times
Be sure to connect the black earth lead to it first.
à la borne +12 V qui est alimentée en permanence
Raccordez d'abord le fil de masse noir.
Rear speakers
Haut-parleurs arrière
Purple
Mauve
Right
Droit
Black-striped
Noir rayé
Black
Noir
to a metal surface of the car
First connect the black earth lead, then connect the yellow and red power input leads.
vers un point métallique de la voiture
Branchez d'abord le fil de masse noir et, ensuite, les fils d'entrée d'alimentation jaune et rouge.

Notes on the control and power supply leads
- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna in the rearside glass, it is necessary to connect the power antenna control lead (blue) or the accessory power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.*
- *A power antenna without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Remarques sur les câbles de commande et d'alimentation
- *Le fil de commande d'antenne électrique (bleu) assure une alimentation de +12 V CC lorsque vous mettez le syntoniseur sous tension.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, il est nécessaire de raccorder le fil de commande de l'antenne électrique (bleu) ou le fil d'entrée d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut être utilisée avec cet appareil.*

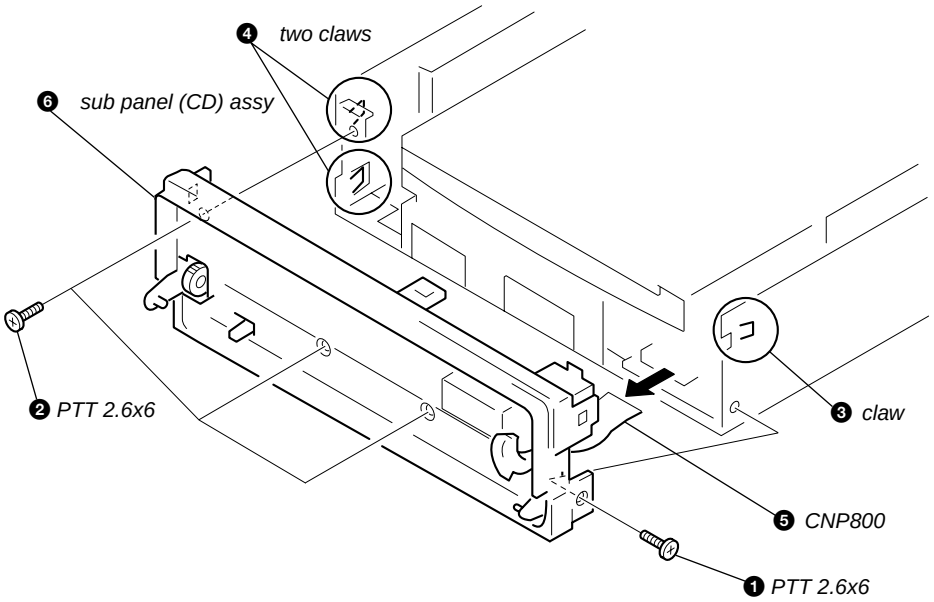
Connexion pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur la connexion des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Ne pas raccorder des haut-parleurs actifs (avec amplificateurs intégrés) aux bornes de haut-parleur de l'appareil sous peine de les endommager. Veiller à raccorder des haut-parleurs passifs à ces bornes.*

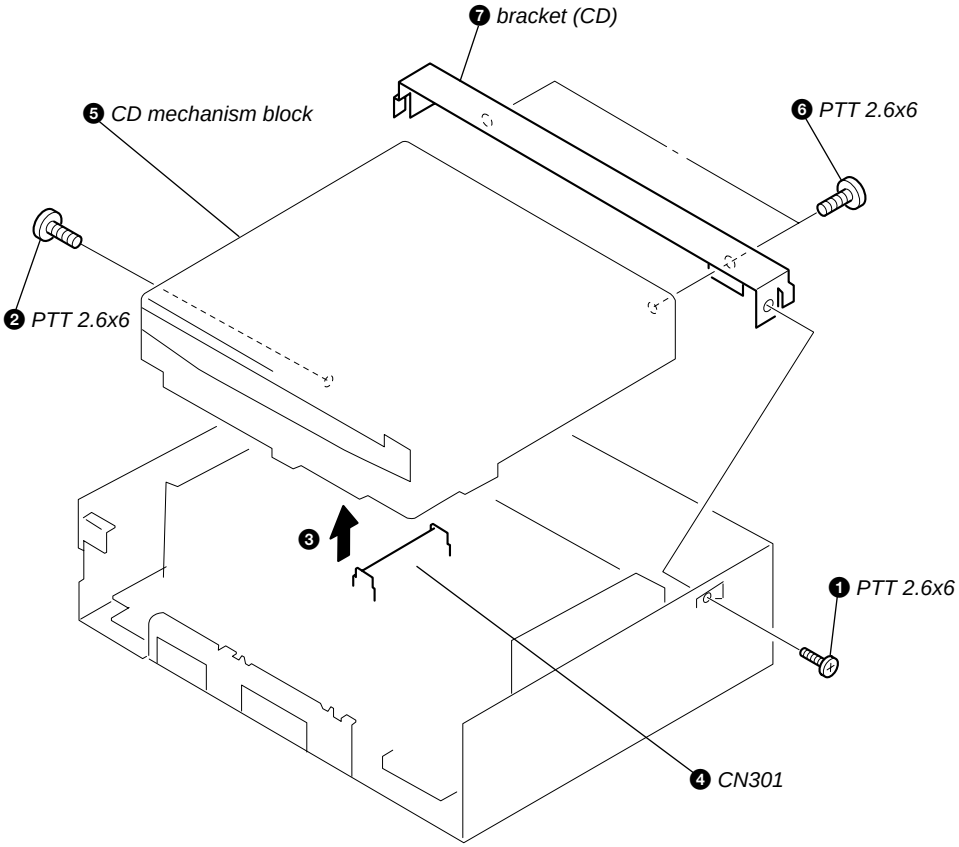
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

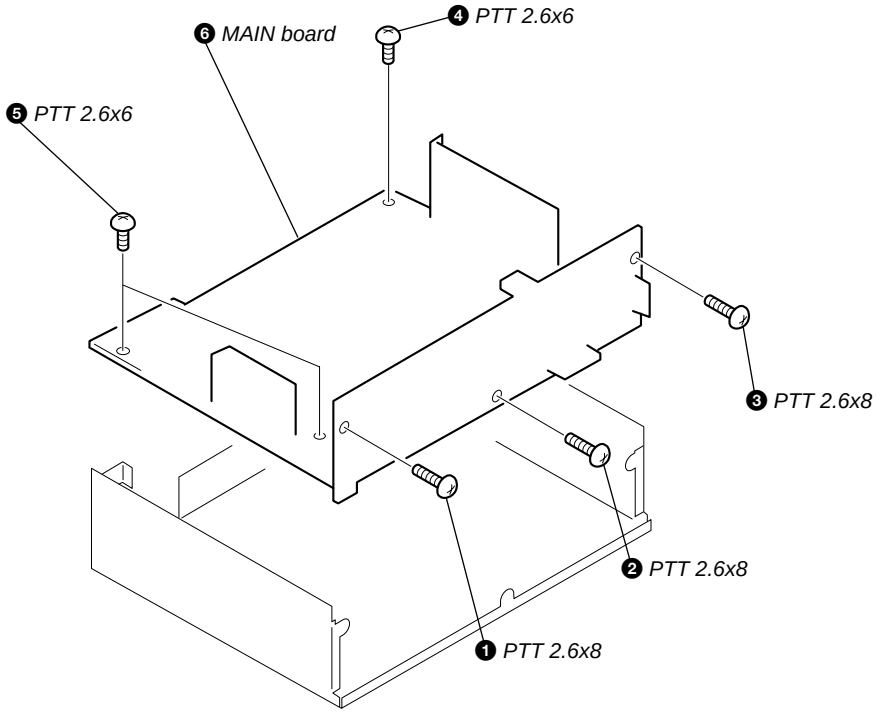
2-1. SUB PANEL (CD) ASSY



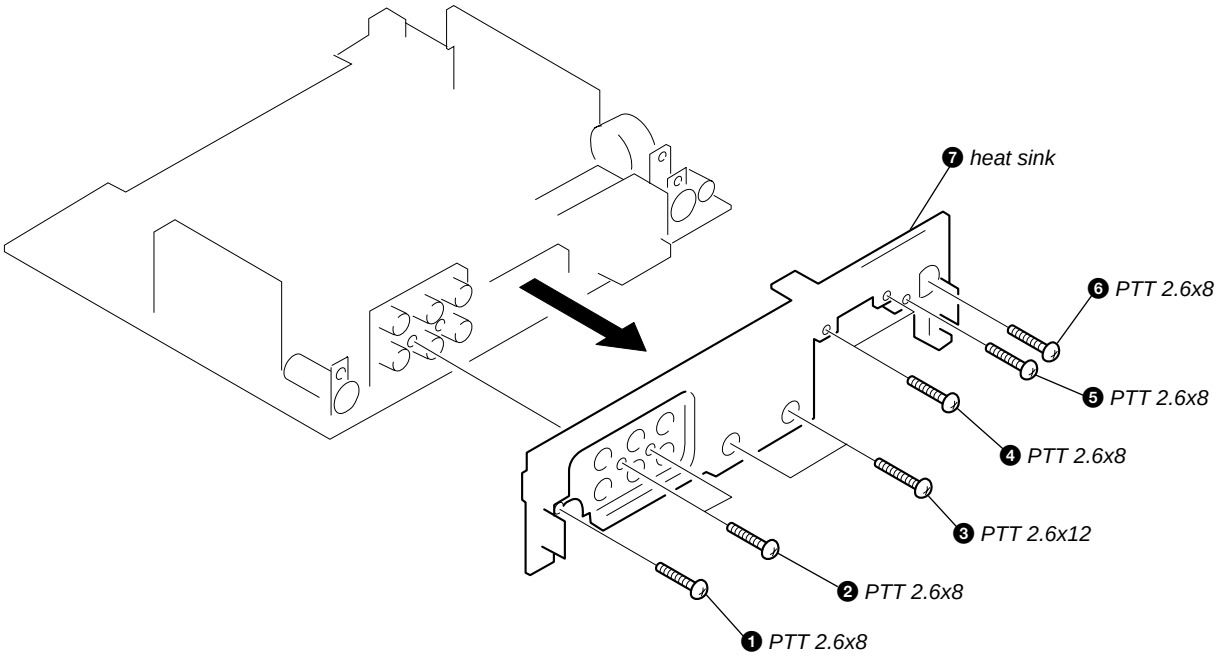
2-2. CD MECHANISM BLOCK



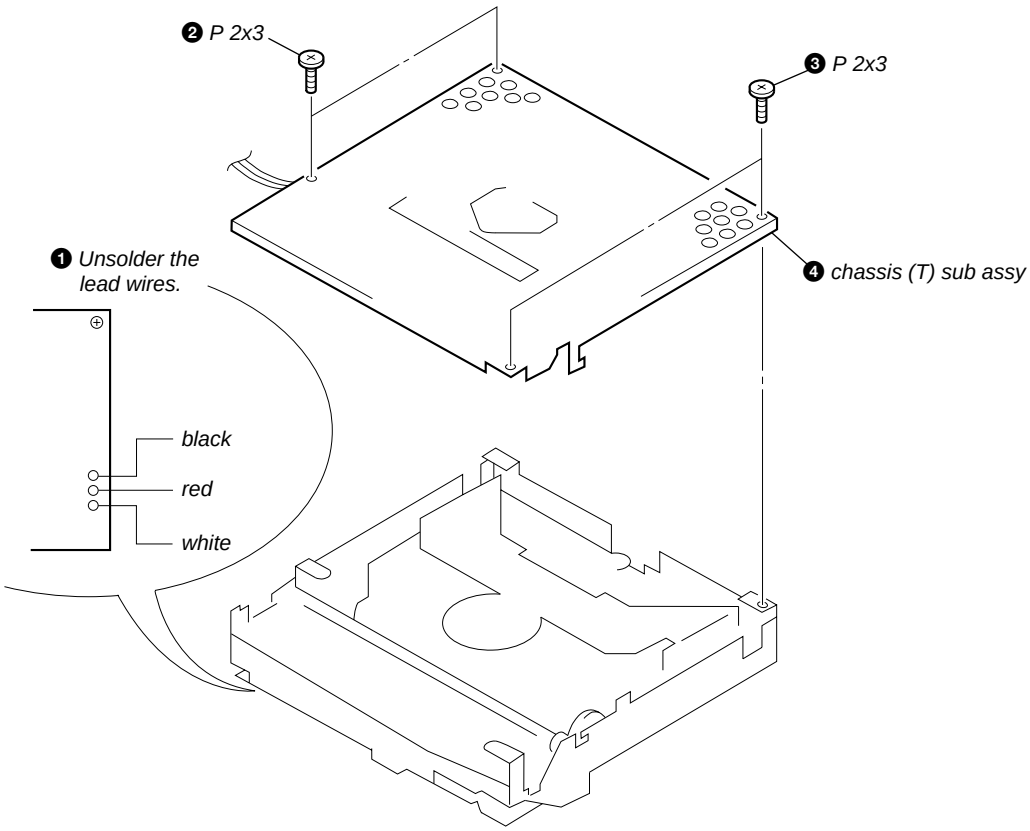
2-3. MAIN BOARD



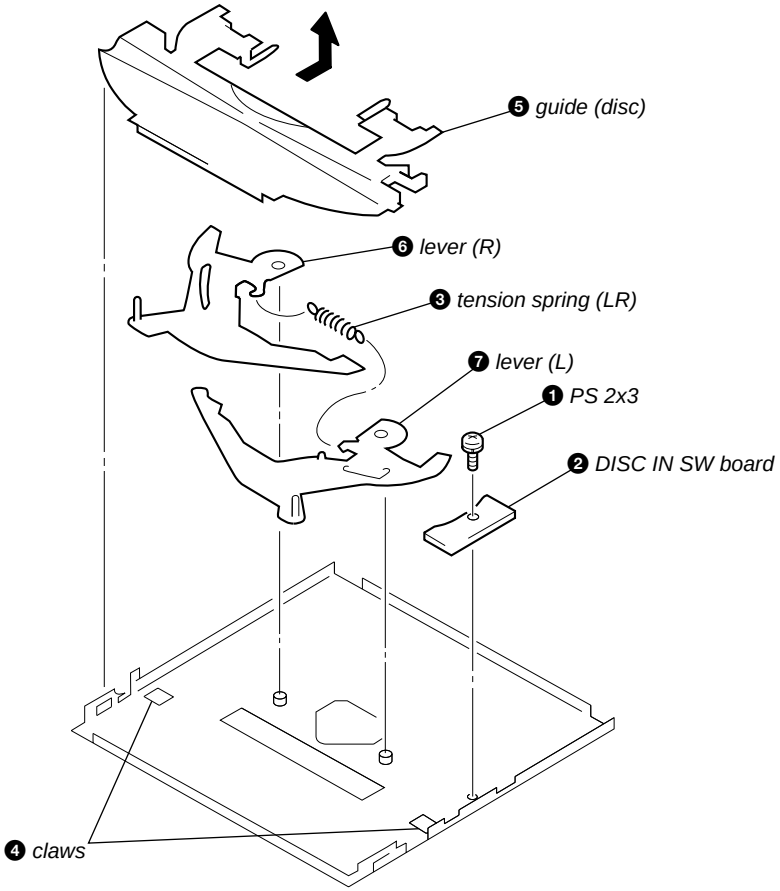
2-4. HEAT SINK



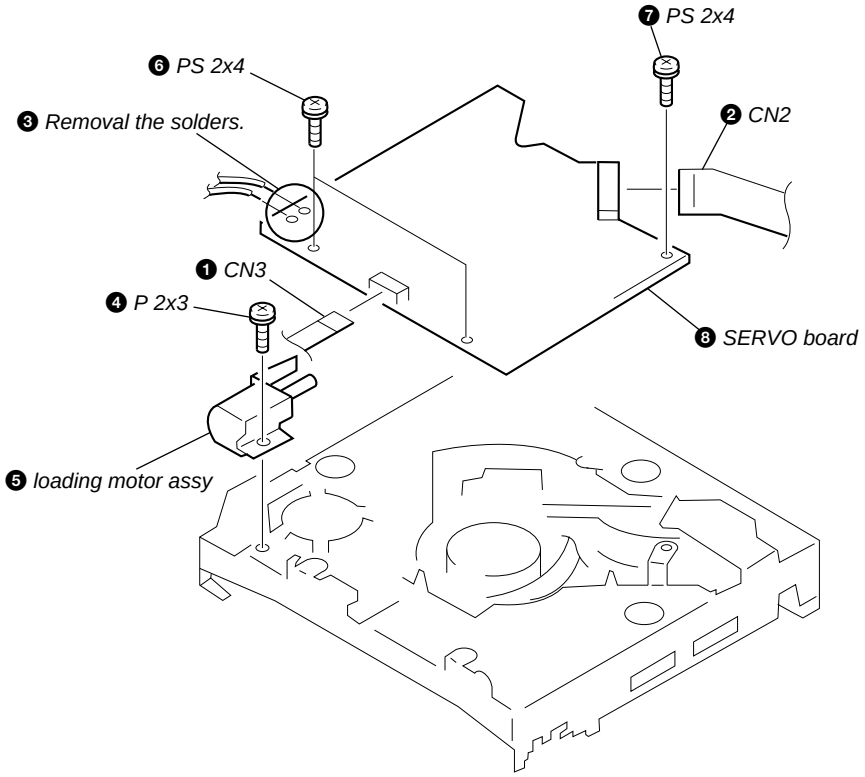
2-5. CHASSIS (T) SUB ASSY



2-6. LEVER SECTION



2-7. SERVO BOARD



2-8. SHAFT ROLLER ASSY

• When installing, take note of the positions arm (roller) and washers. (Fig. 1)

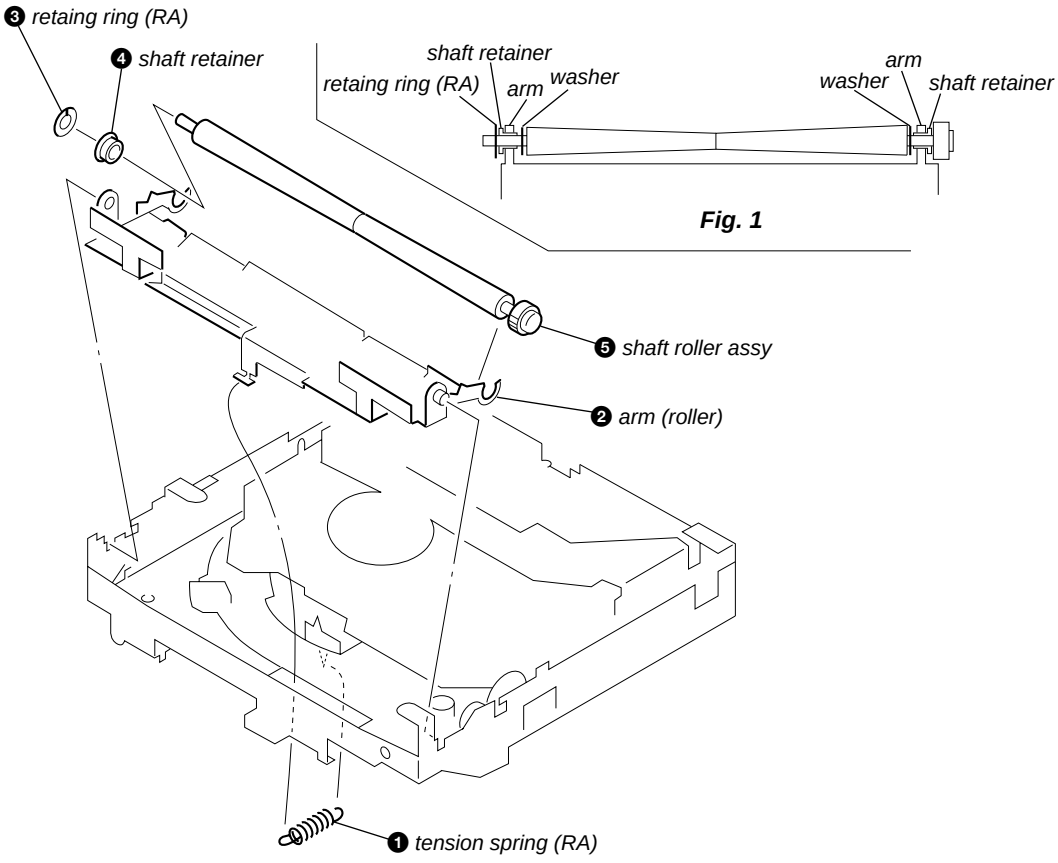
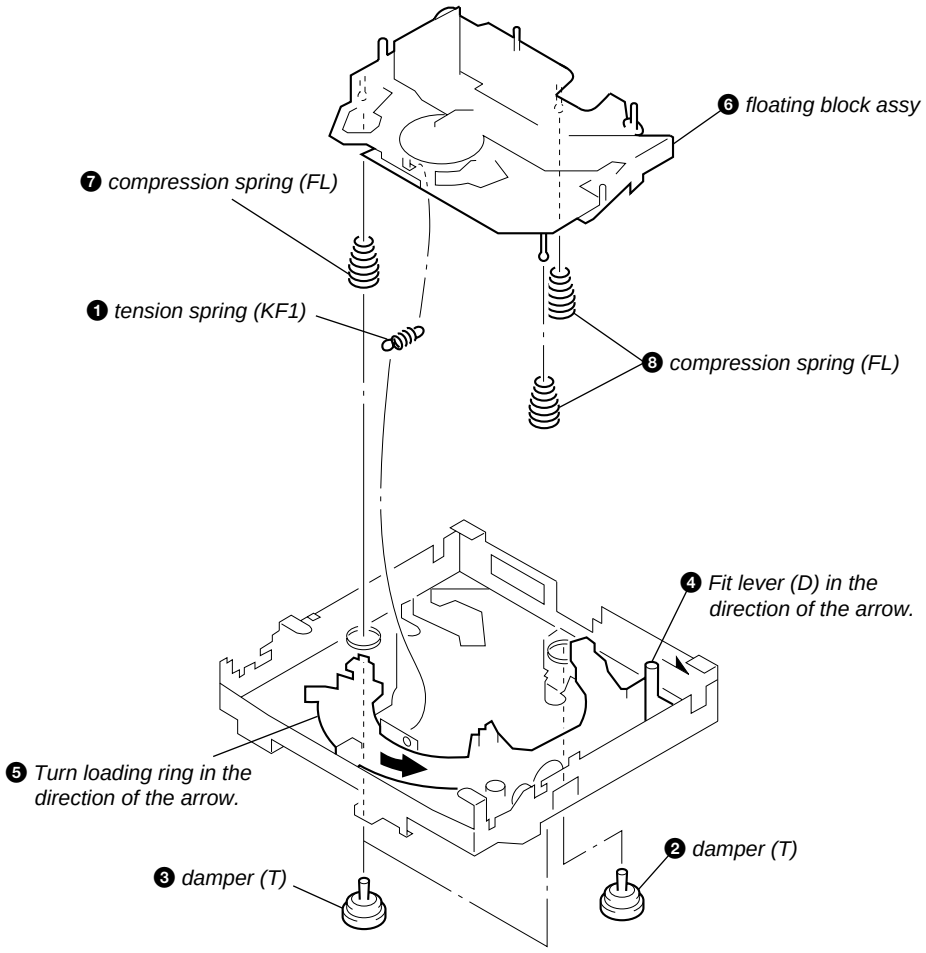
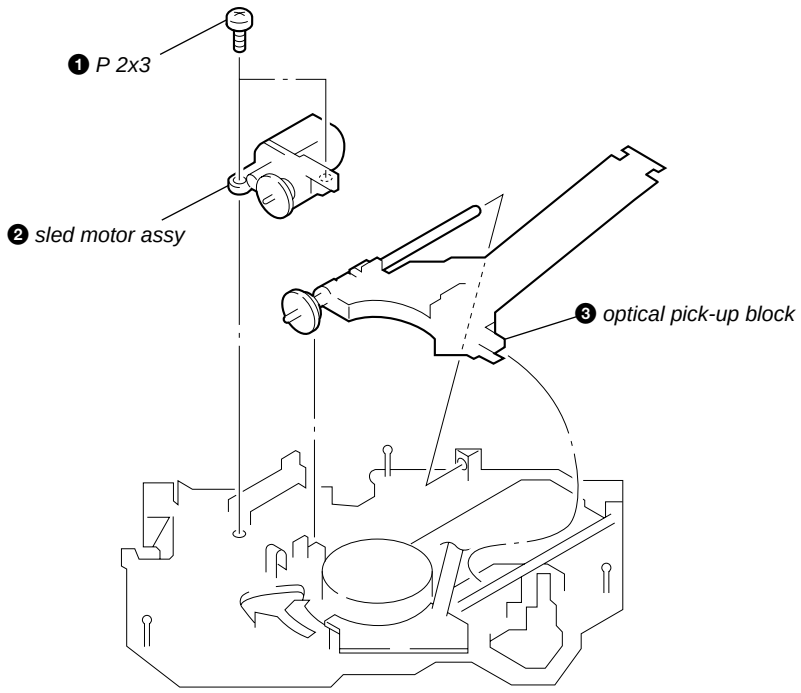


Fig. 1

2-9. FLOATING BLOCK ASSY


❻ floating block assy
❼ compression spring (FL)
❶ tension spring (KF1)
❽ compression spring (FL)
❹ Fit lever (D) in the direction of the arrow.
❺ Turn loading ring in the direction of the arrow.
❷ damper (T)
❸ damper (T)

2-10. OPTICAL PICK-UP BLOCK



SECTION 3
DIAGRAMS

3-1. IC PIN DESCRIPTIONS

• IC501 CXD2598Q (DIGITAL SERVO, DIGITAL SIGNAL PROCESSOR) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	DVDD	—	Digital power supply pin
2	DVSS	—	Digital ground
3	SOUT	O	Servo brock serial data output (Not used.)
4	SOCK	O	Servo brock serial data read clock output (Not used.)
5	XOLT	O	Servo brock serial data latch output (Not used.)
6	SQSO	O	Sub Q 80 bit, PCM peak and level data output. CD TEXT data output
7	SQCK	I	Clock input from SQSO read output.
8	SCSY	I	Fixed at “L”.
9	SBSO	O	Serial output of sub-P to W. (Not used.)
10	EXCK	I	Clock input from SBSO read output. (Fixed at “L”)
11	XRST	I	System reset (“L”: Reset)
12	STSM	I	System mute input (Fixed at “L”)
13	DATA	I	Serial data input from CPU.
14	XLAT	I	Latch input from CPU. Latch serial data at the falling edge.
15	CLOK	I	Serial data transfer clock input from CPU.
16	SENS	O	SENS output for CPU.
17	SCLK	I	Clock input from SENS serial data read.
18	ATSK	I/O	Input/output for anti-shock.
19	WFCK	O	WFCK (Write Flame Clock) output (Not used.)
20	XUGF	O	XUGF output (Not used.)
21	XPCK	O	XPCK output (Not used.)
22	GFS	O	GFS output
23	C2PO	O	C2PO output (Not used.)
24	SCOR	O	“H” output at either detection, sub code sync S0 or S1.
25	C4M	O	4.2336 MHz output (Not used.)
26	WDCK	O	Word clock input f=2Fs (Not used.)
27	COUT	I/O	Track number count signal input/output (Not used.)
28	MIRR	I/O	Mirror signal input/output (Not used.)
29	DVSS	—	Digital ground
30	DVDD	—	Digital power supply pin
31	DFCT	I/O	Diffect signal input/output (Not used.)
32	FOK	I/O	Focus OK signal output
33	PWM1	I	External control input of spindle motor.
34	LOCK	I/O	Lock signal input/output
35	MDP	O	Servo control output of spindle motor.
36	SSTP	I	Disc most inner track detection signal input
37	FSTIO	I/O	2/3 frequency division output of pins ⑧⑥ and ⑧⑦. (Not used.)
38	SFDR	O	Sled drive output
39	SRDR	O	Sled drive output
40	TFDR	O	Tracking drive output
41	TRDR	O	Tracking drive output
42	FFDR	O	Focus drive output
43	FRDR	O	Focus drive output
44	DVDD	—	Digital power supply pin
45	DVSS	—	Digital ground
46	TEST	I	Test pin (Fixed at “L”.)
47	TES1	I	Test pin (Fixed at “L”.)
48	XTSL	I	X’tal select input (“L”: 16.9344 MHz, “H”: 33.8688 MHz)
49	VC	I	Center voltage input
50	FE	I	Focus error signal input
51	SE	I	Sled error signal input

Pin No.	Pin Name	I/O	Pin Description
52	TE	I	Tracking error signal input
53	CE	I	Center servo analog input
54	RFDC	I	RF signal input
55	ADIO	O	Test pin (Not used.)
56	AVSSO	—	Analog ground
57	IGEN	I	Constant current input from OP amplifier.
58	AVDDO	—	Analog ground
59	ASYO	O	EFM full-swing output (“L”: VSS, “H”: VDD)
60	ASYI	I	Asymmetry comparate voltage input
61	RFAC	I	EFM signal input
62	AVSS3	—	Analog ground
63	CLTV	I	VCO control voltage input from master.
64	FILO	O	Filter output for master PLL (slave=digital PLL)
65	FILI	I	Filter input from master PLL.
66	PCO	O	Charge pump output for master PLL.
67	AVDD3	—	Analog power supply pin
68	BIAS	I	Asymmetry circuit constant current input
69	VCTL	I	VCO2 control input from wideband EFM PLL. (Not used.)
70	V16M	O	VCO2 oscillator output for wideband EFM PLL. (Not used.)
71	VPCO	O	Charge pump output for wideband EFM PLL. (Not used.)
72	DVSS	—	Digital ground
73	MD2	I	Digital out ON/OFF control input (“L”: OFF, “H”: ON)
74	DOUT	O	Digital out output
75	ASYE	I	Asymmetry circuit ON/OFF input (“L”: OFF, “H”: ON)
76	DVDD	—	Digital power supply pin
77	LRCK	O	D/A interface LR clock output (f=Fs)
78	LRCKI	I	D/A interface LR clock input
79	PCMD	O	D/A interface serial data output (2’s COMP, MSB fast)
80	PCMD	I	D/A interface serial data input (2’s COMP, MSB fast)
81	BCK	O	D/A interface bit clock output
82	BCKI	I	D/A interface bit clock input
83	EMPH	O	Emphasis ON/OFF signal output
84	EMPHI	I	Emphasis ON/OFF signal input (“H”: ON, “L”: OFF)
85	XVDD	—	Power supply for master clock.
86	XTAI	I	X’tal oscillator input from master clock (16.9344 MHz).
87	XTAO	O	X’tal oscillator output for master clock (16.9344 MHz).
88	XVSS	—	Ground pin for master clock.
89	AVDD1	—	Analog power supply pin
90	AOUT1	O	Lch analog output
91	AIN1	I	Lch OPAMP input
92	LOUT1	O	Lch LINE output
93	AVSS1	—	Analog ground
94	AVSS2	—	Analog ground
95	LOUT2	O	Rch LINE output
96	AIN2	I	Rch OPAMP input
97	AOUT2	O	Rch analog output
98	AVDD2	—	Analog power supply pin
99	RMUT	O	Rch “0” detect Flug (Not used.)
100	LMUT	O	Lch “0” detect Flug (Not used.)

• IC5 CXP84640-072Q (CD SYSTEM CONTROL) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	ITRPT	—	Not used in this set.
2, 3	—	—	Not used in this set.
4, 5	NCO	—	Not used in this set.
6	OPEN	I	Front panel open detection input
7	CLOSE	O	Front panel close control output
8	LINKOFF	I	Bus interface link input
9	NCO	—	Not used in this set.
10	$\overline{\text{D SW}}$	I	Down switch input (SW4)
11	SSTP	I	Limit switch input (SW3)
12, 13	NCO	—	Not used in this set.
14, 15	—	—	Not used in this set.
16	EMPH O	O	De-emphasis ON/OFF control output
17	CDMON	O	CD mechanism deck power control output
18	CD ON	O	CD power control output
19	A MUT	O	System attenuate control output
20	$\overline{\text{LD ON}}$	O	Laser power ON/OFF control output
21	$\overline{\text{CD RST}}$	O	CD system reset output
22	HOLD	O	Hold switch output
23	AGC CONT	O	AGC control output
24	—	—	Not used in this set.
25	PH3	I	Not used in this set.
26	$\overline{\text{TSTIN0}}$	I	Not used in this set.
27	$\overline{\text{TSTIN1}}$	I	Not used in this set.
28	$\overline{\text{TST.CLV}}$	I	Not used in this set.
29	NCO	—	Not used in this set.
30	$\overline{\text{RESET}}$	I	System reset input (“L”=Reset)
31	X IN	I	X’tal oscillator input from system clock. (10 MHz)
32	$\overline{\text{X OUT}}$	O	X’tal oscillator output for system clock. (10 MHz)
33	GND	—	Analog ground
34	$\overline{\text{XT OUT}}$	O	Not used in this set.
35	XT IN	I	Not used in this set.
36	AVSS	—	A/D converter ground
37	AVREF	I	A/D converter reference voltage input
38	TEP L	I	Not used in this set.
39	TEP H	I	Not used in this set.
40	SLED–	I	Sled drive input
41	PH2	I	Not used in this set.
42	SEK/SMET	I	Fixed at “H” in this set.
43	GFS/MNT2 SEL	I	Fixed at “H” in this set.
44	SC-JIG ON/OFF	I	Fixed at “H” in this set.
45	SCLK	O	CD-TEXT data read clock output
46	LOCK	I/O	Lock signal input/output
47	—	—	Not used in this set.
48	SCK2	O	Sub Q read clock output
49	SI2	I	Sub Q 80 bit, PCM peak and level data 16 bit input.
50	—	—	Not used in this set.
51	BUS CLK	I/O	Bus system serial clock input/output
52	BUS SI	I	Bus system serial interface input
53	BUS SO	O	Bus system serial interface output
54	F OK	I	Focus OK signal input
55	GFS	I	GFS signal detection input
56	TEST MODE	I	Fixed at “H” in this set.

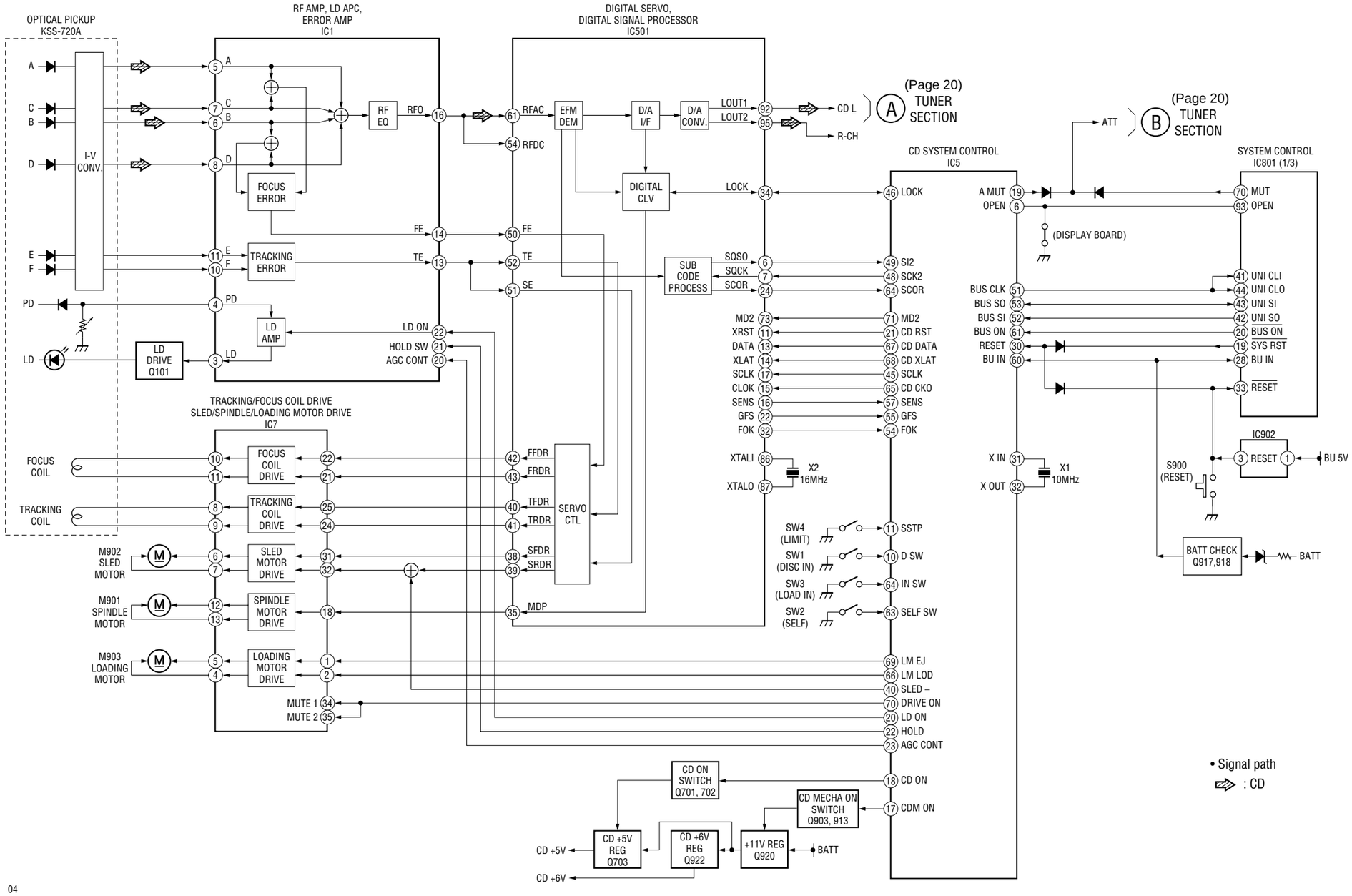
Pin No.	Pin Name	I/O	Pin Description
57	SENS	I	SENS signal input
58	—	—	Not used in this set.
59	—	—	Not used in this set.
60	BU.IN	I	Back-up power detection input
61	$\overline{\text{BUSON}}$	I	Bus on control input
62	$\overline{\text{IN SW}}$	I	Disc in switch input (SW1)
63	$\overline{\text{SELF SW}}$	I	Self switch input (SW2)
64	SCOR	O	Sub-code sync output
65	CD-CKO	O	CD signal process serial clock input
66	LM LOD	O	Loading motor control output
67	CD DATA	O	CD signal process serial data output
68	CD-XLAT	O	CD signal process serial data latch output
69	LM-EJ	O	Loading motor control output
70	DRV-OE	O	Focus/tracking coil/sled motor control output
71	MD2	O	Digital out ON/OFF control output (“L”: OFF, “H”: ON)
72	VDD	—	Power supply pin
73	NIH	I	Fixed at “H” in this set.
74	V/Z	I	Fixed at “H” in this set.
75	PH1	I	Not used in this set.
76	—	—	Not used in this set.
77	DOUT-SEL	I	Fixed at “H” in this set.
78 – 80	—	—	Not used in this set.

• IC801 MN101C49KTB (SYSTEM CONTROL) (MAIN BOARD)

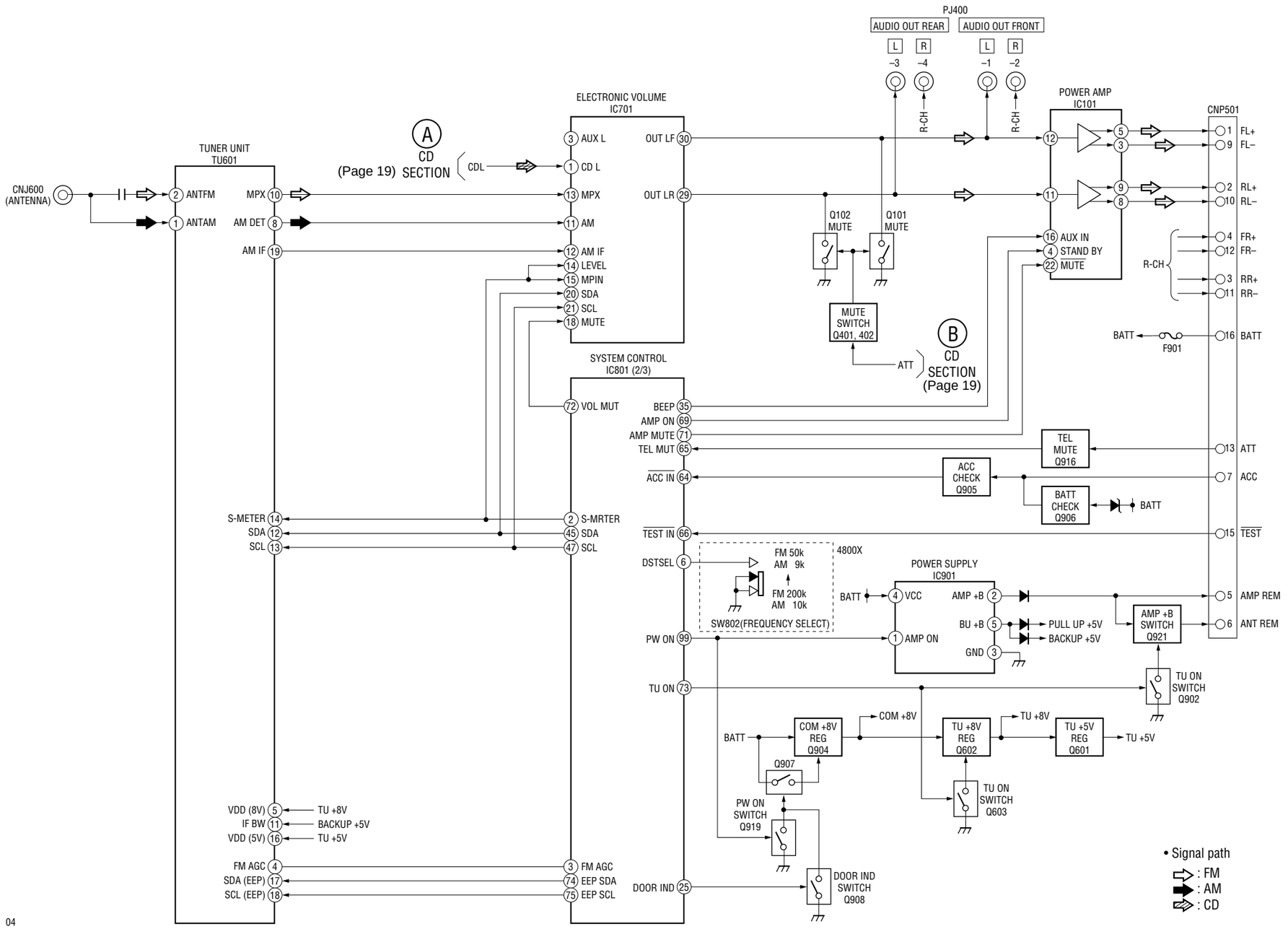
Pin No.	Pin Name	I/O	Pin Description
1	VREF–	—	Ground for A/D converter power supply
2	S METER	I	S meter voltage detect signal input
3	FM AGC	I	FM auto gain control signal input
4	KEY IN1	I	KEY signal input
5	KEY IN0	I	KEY signal input
6	DSTSEL	I	4000X/4005: Not used. 4800X: Frequency select signal input
7	RC IN0	I	Rotary commander signal input
8	FUNC SEL	I	Model function selection pin
9	NIL	—	Ground
10	VREF+	—	A/D converter power supply
11	VDD	—	Power supply (+5 V) input pin
12	OSC OUT	O	High speed clock signal output (18.432 MHz)
13	OSC IN	I	High speed clock signal input (18.432 MHz)
14	VSS	—	Ground for power supply
15	XI	I	Low speed clock signal input (32 kHz)
16	XO	O	Low speed clock signal output (32 kHz)
17	MMOD	—	Not used. (Fixed at “L”.) Memory mode select signal input
18	RC IN1	I	Rotary commander shift key signal input
19	$\overline{\text{SYSRST}}$	O	System reset signal output
20	$\overline{\text{BUS ON}}$	O	Bus on control signal output
21	LCD DATA	O	LCD serial data signal output
22	LCD CE	O	LCD chip enable signal output
23	LCD CLK	O	LCD serial clock signal output
24	ILL ON	O	Illumination power supply control signal output
25	DOOR IND	O	Control signal output for power on sub panel when open to front panel
26	KEY ACK	I	Key active interrupt detect signal input
27	$\overline{\text{NOSE}}$	I	Front panel attachment detection input
28	BU IN	I	Back up power supply setect signal input
29	SIRCS	I	Remote control signal input
30, 31	NC	—	Not used. (Fixed at “L”.)
32	RAM	—	Not used.
33	$\overline{\text{RESET}}$	I	Reset signal input
34	NC	—	Not used.
35	BEEP	O	Beep signal input
36	NC (FUNC SEL)	I	Model function selection pin
37	NC (FUNC SEL)	I	Model function selection pin
38 – 40	NC	—	Not used.
41	UNI CLI	I	Bus system serial clock signal input
42	UNI SO	O	Bus system serial interface signal output
43	UNI SI	I	Bus system serial interface signal input
44	UNI CLO	O	Bus system serial clock signal output
45	SDA	I/O	I2C bus serial data signal input/output
46	NC	—	Not used.
47	SCL	O	I2C bus serial clock signal output
48, 49	NC	—	Not used.
50	LOCK	I	Check when remove to lock of MDNO CLV SERVO
51 – 63	NC	—	Not used.
64	$\overline{\text{ACC IN}}$	I	Accessory power supply voltage detection input
65	TEL MUT	I	Telephone attenuate detect signal input
66	$\overline{\text{TEST IN}}$	I	Test mode setting detect first stage signal input
67	ANT CUT	—	Not used.
68	NC	—	Not used.

Pin No.	Pin Name	I/O	Pin Description
69	AMP ON	O	Power supply on/off control signal output
70	MUT	O	System attenuate control signal output
71	AMP MUT	O	Power amp attenuate control signal output
72	VOL MUT	O	Mute control signal output for electrical volume
73	TU ON	O	Tuner attenuate signal output
74	EEP SDA	I/O	Tuner EEPROM serial data signal input/output
75	EEP SCL	O	Runer EEPROM serial clock signal output
76	IF BW	I	Not used.
77	NC	—	Not used. Tuner switch VCO level shift signal input
78	NC	—	Not used.
79	REIN1	I	Rotary encoder signal input
80	REIN0	I	Rotary encoder signal input
81	$\overline{\text{AD ON}}$	O	Power control output for A/D conversion
82 – 92	NC	—	Not used.
93	OPEN	I	Front panel open/close condition signal input
94 – 98	NC	—	Not used.
99	PW ON	O	System power supply control signal output
100	NC	—	Not used.

3-2. BLOCK DIAGRAM — CD SECTION —



3-3. BLOCK DIAGRAM — TUNER SECTION —



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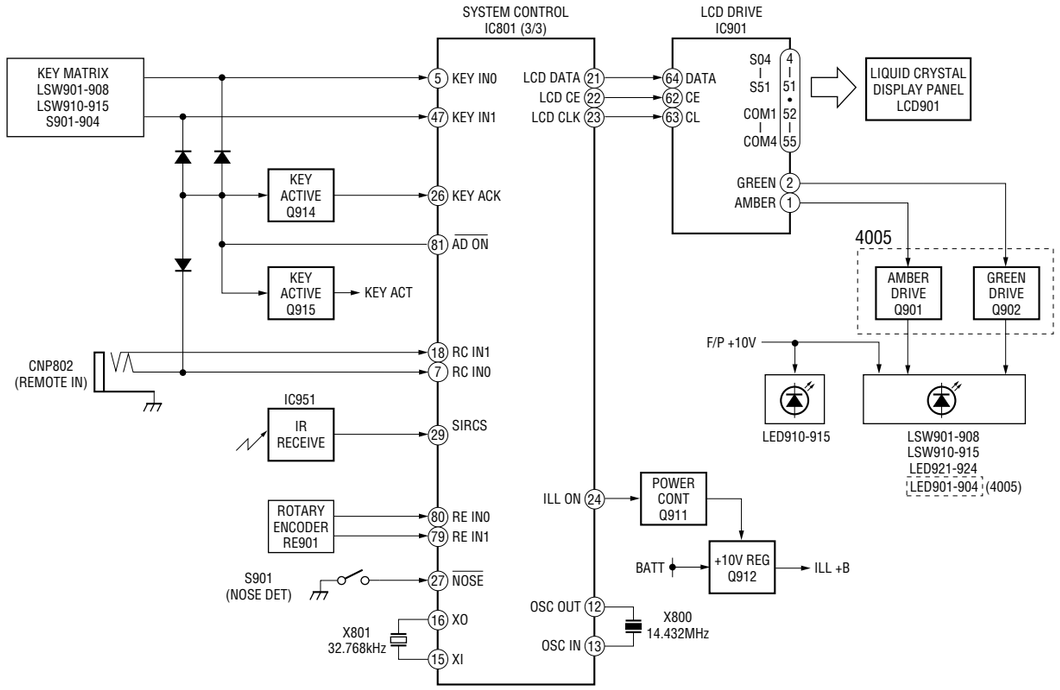
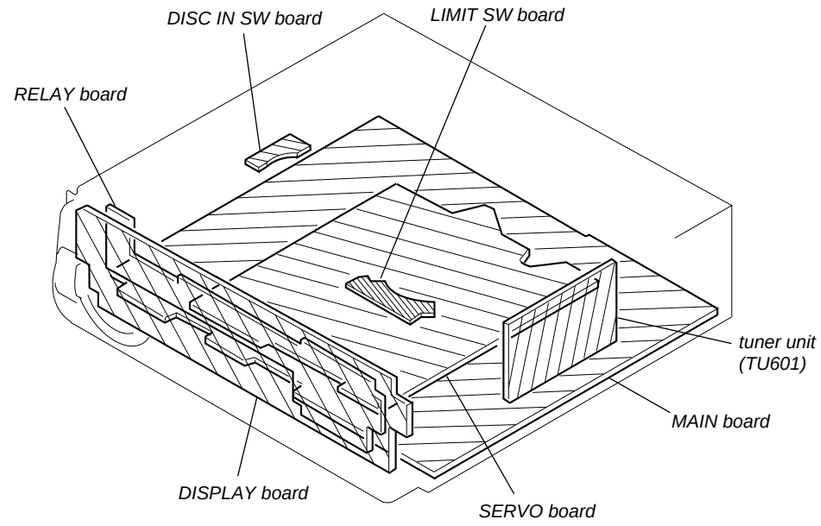
3-4. BLOCK DIAGRAM — DISPLAY SECTION —



3-5. CIRCUIT BOARDS LOCATION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for schematic diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- B+ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : AM
  - ⇨ : CD

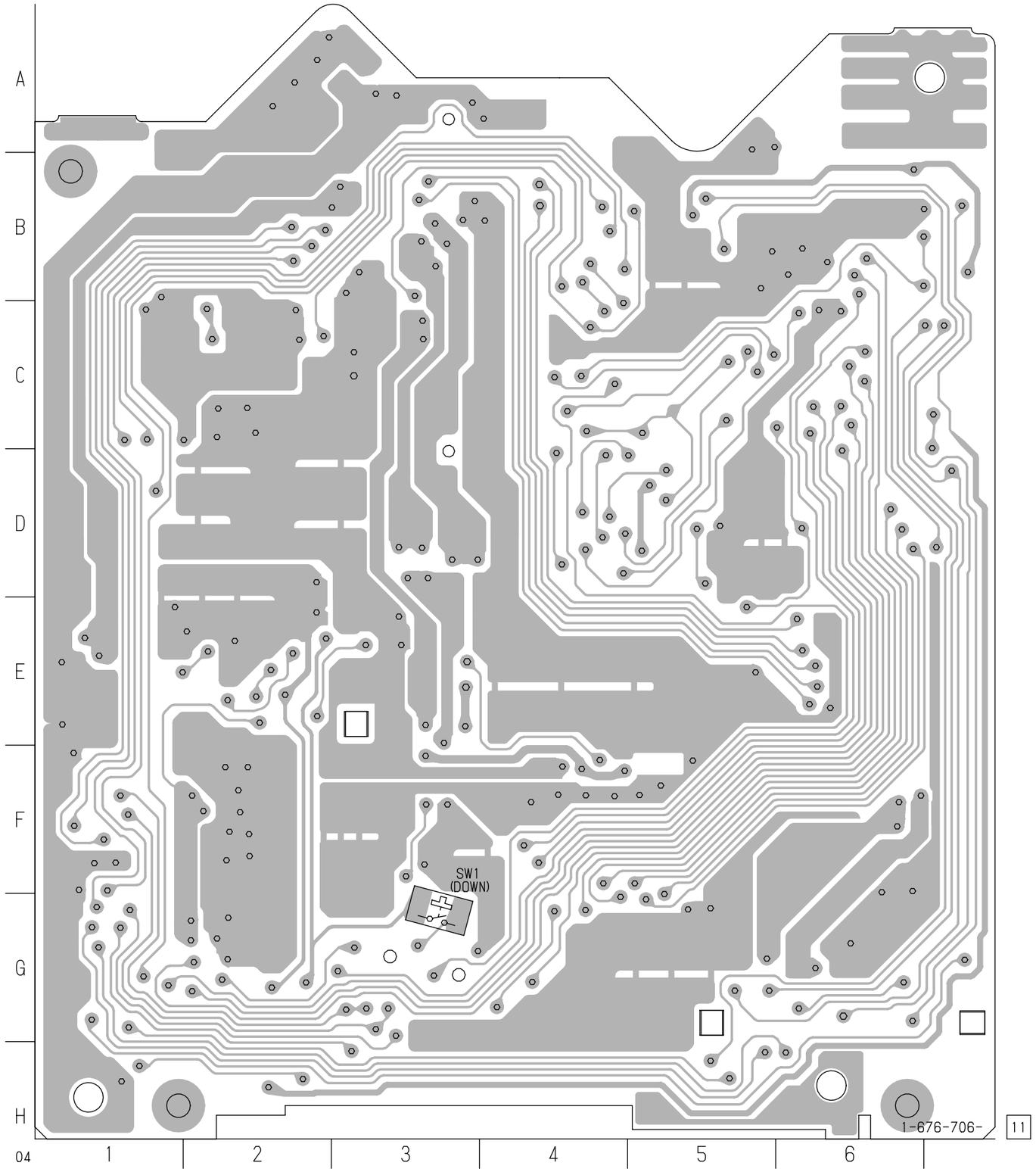
for printed wiring boards:

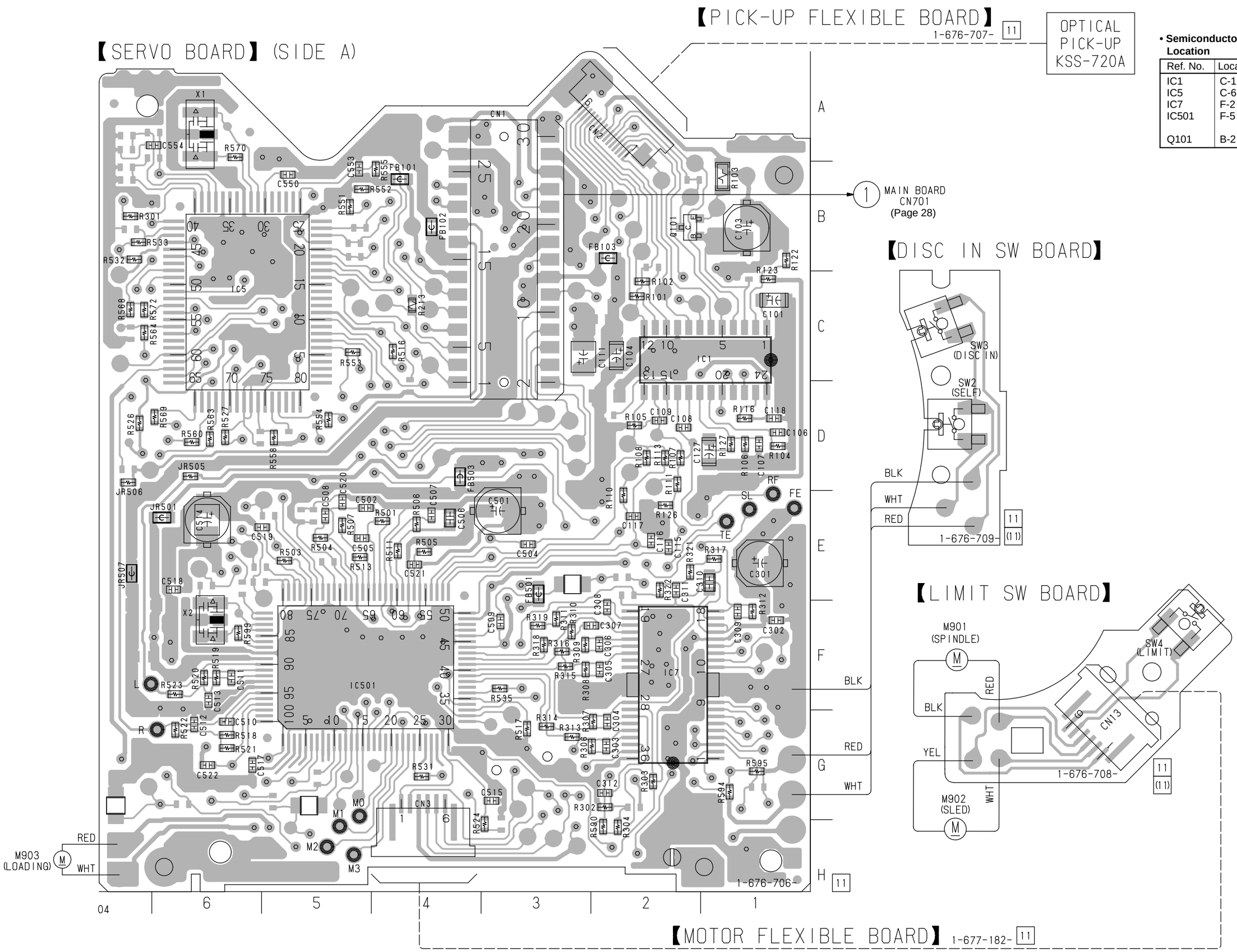
- o——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ○ : Through hole.
- ▒ : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

3-6. PRINTED WIRING BOARDS — CD MECHANISM SECTION —

【SERVO BOARD】(SIDE B)

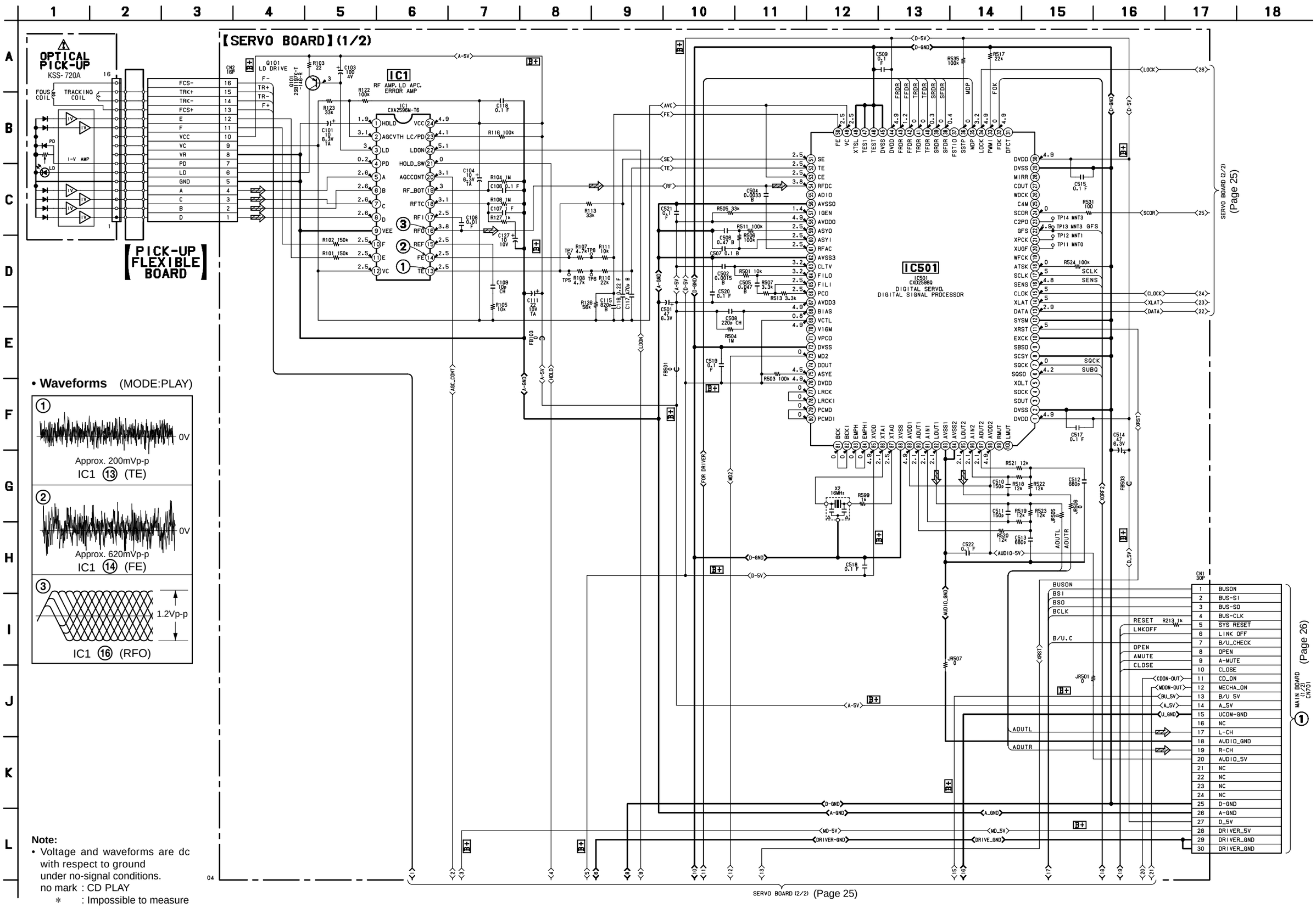




- **Semiconductor Location**

Ref. No.	Location
IC1	C-1
IC5	C-6
IC7	F-2
IC501	F-5
Q101	B-2

3-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (1/2) — • Refer to page 33 for IC Block Diagrams.



• Waveforms (MODE:PLAY)

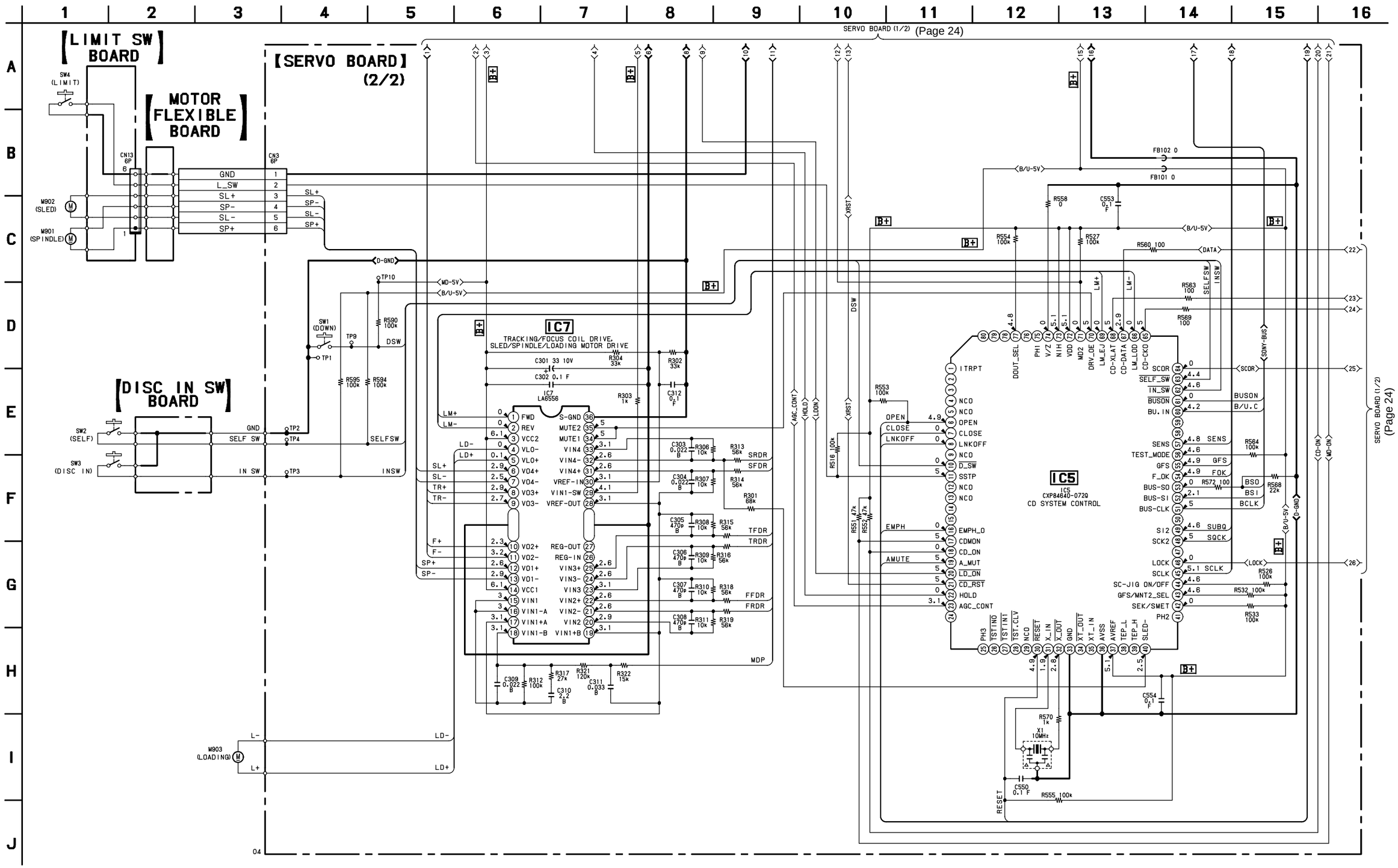
① 0V
Approx. 200mVp-p
IC1 ⑬ (TE)

② 0V
Approx. 620mVp-p
IC1 ⑭ (FE)

③ 1.2Vp-p
IC1 ⑯ (RFO)

Note:
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : CD PLAY
  ∗ : Impossible to measure

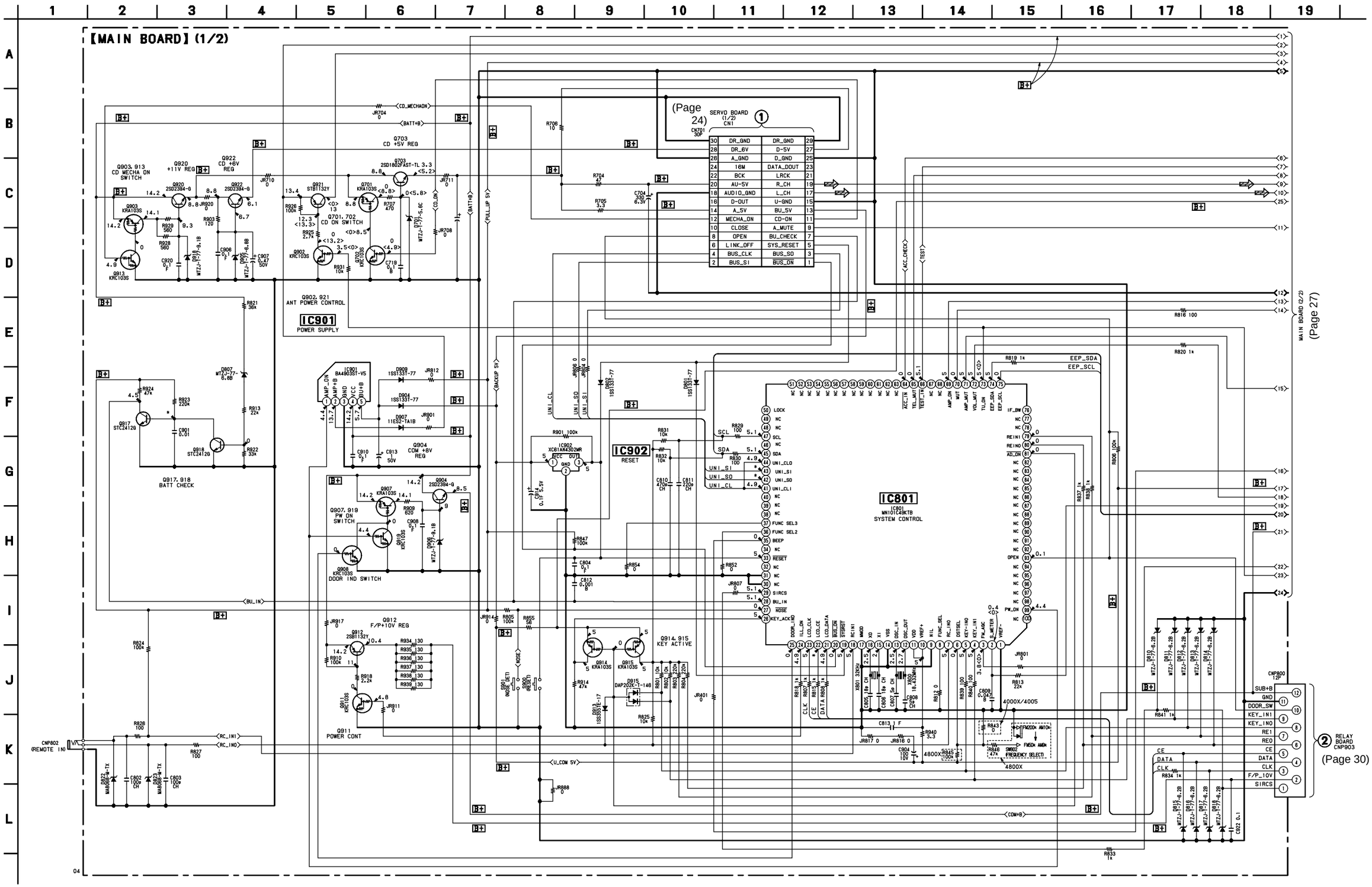
3-8. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (2/2) — • Refer to page 34 for IC Block Diagrams.



Note:

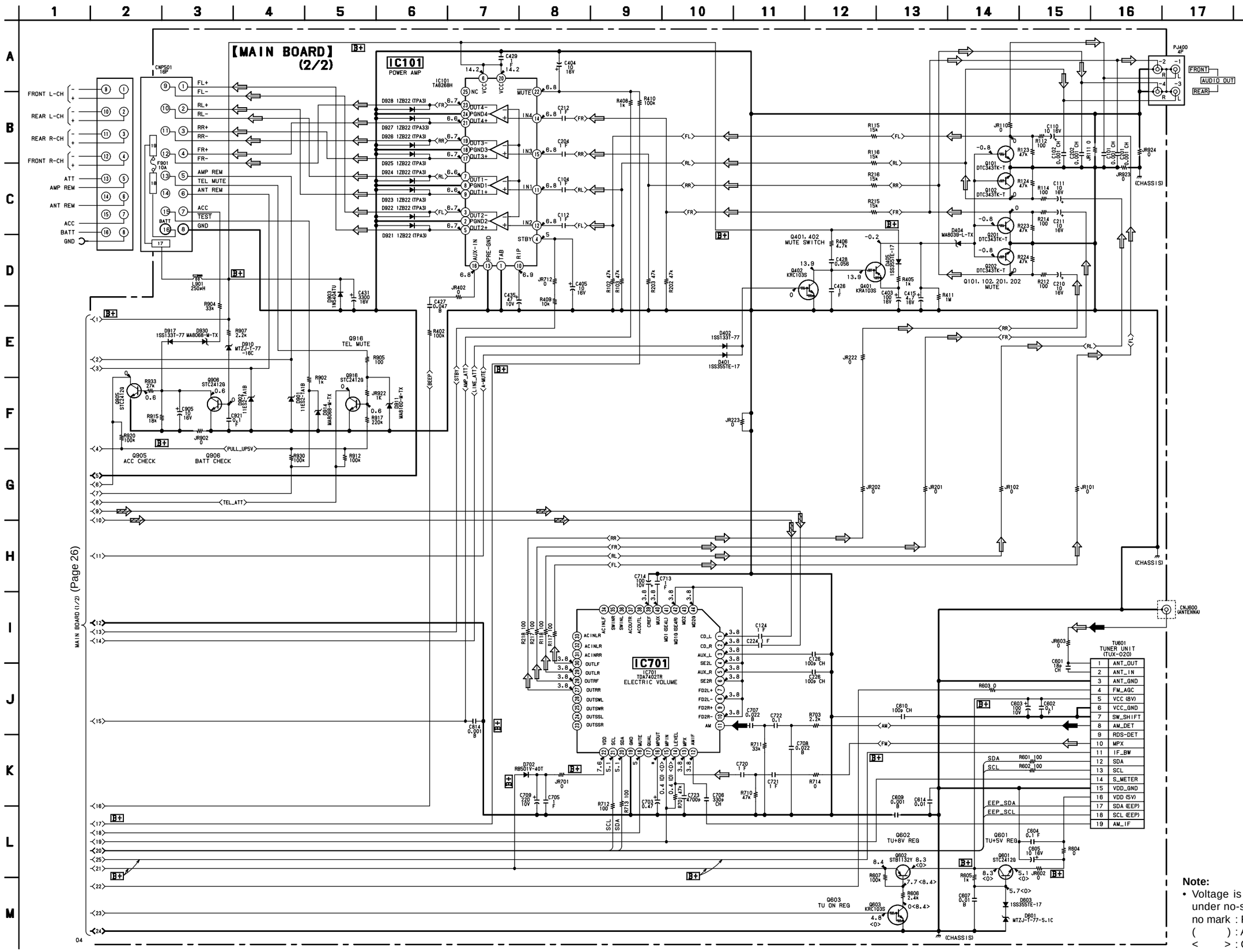
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : CD PLAY
  ∗ : Impossible to measure

3-9. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) — • Refer to page 33 for IC Block Diagrams.



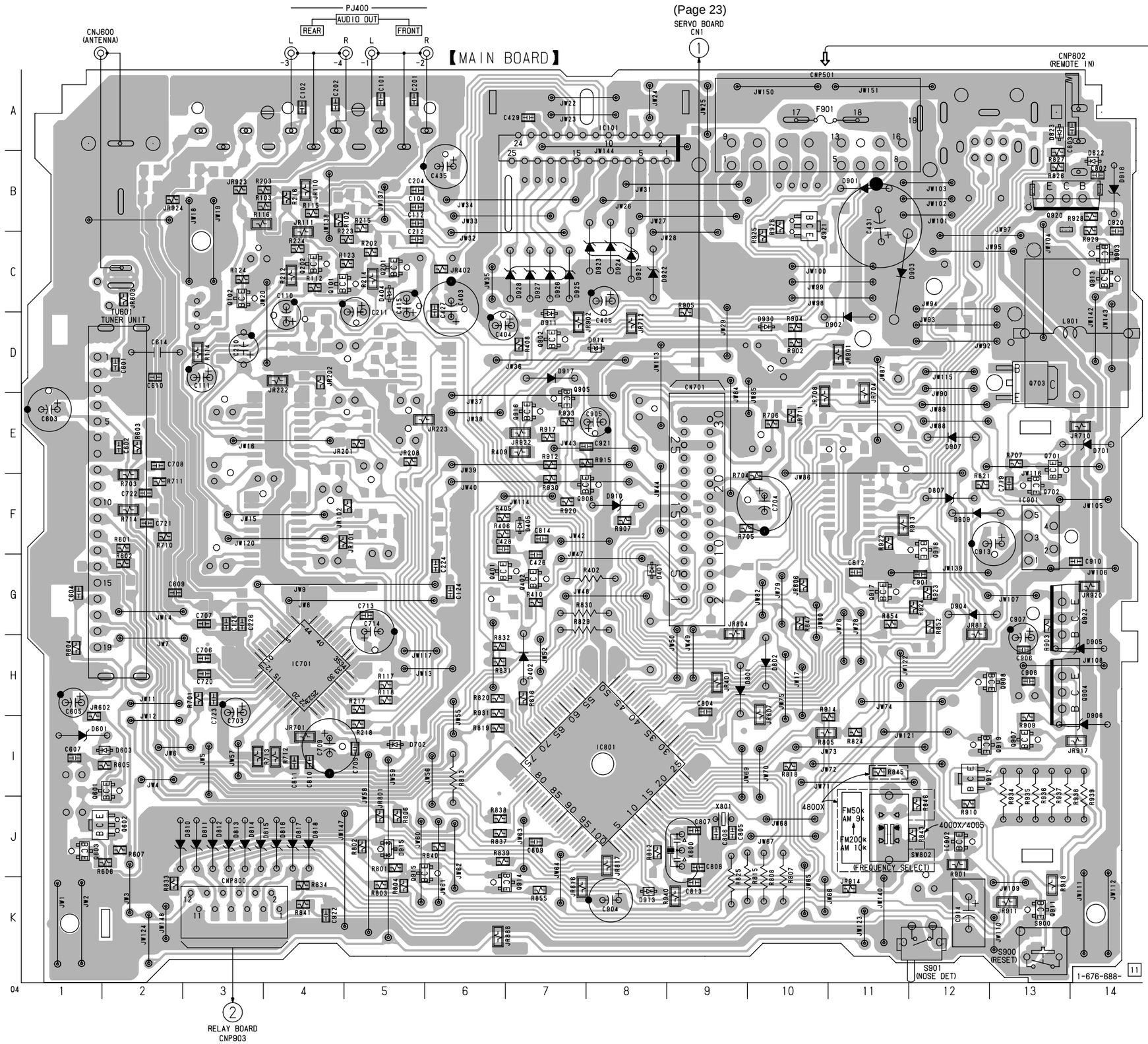
Note:
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : AM
  < > : CD PLAY

3-10. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 35 for IC Block Diagrams.



Note:
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : AM
  < > : CD PLAY

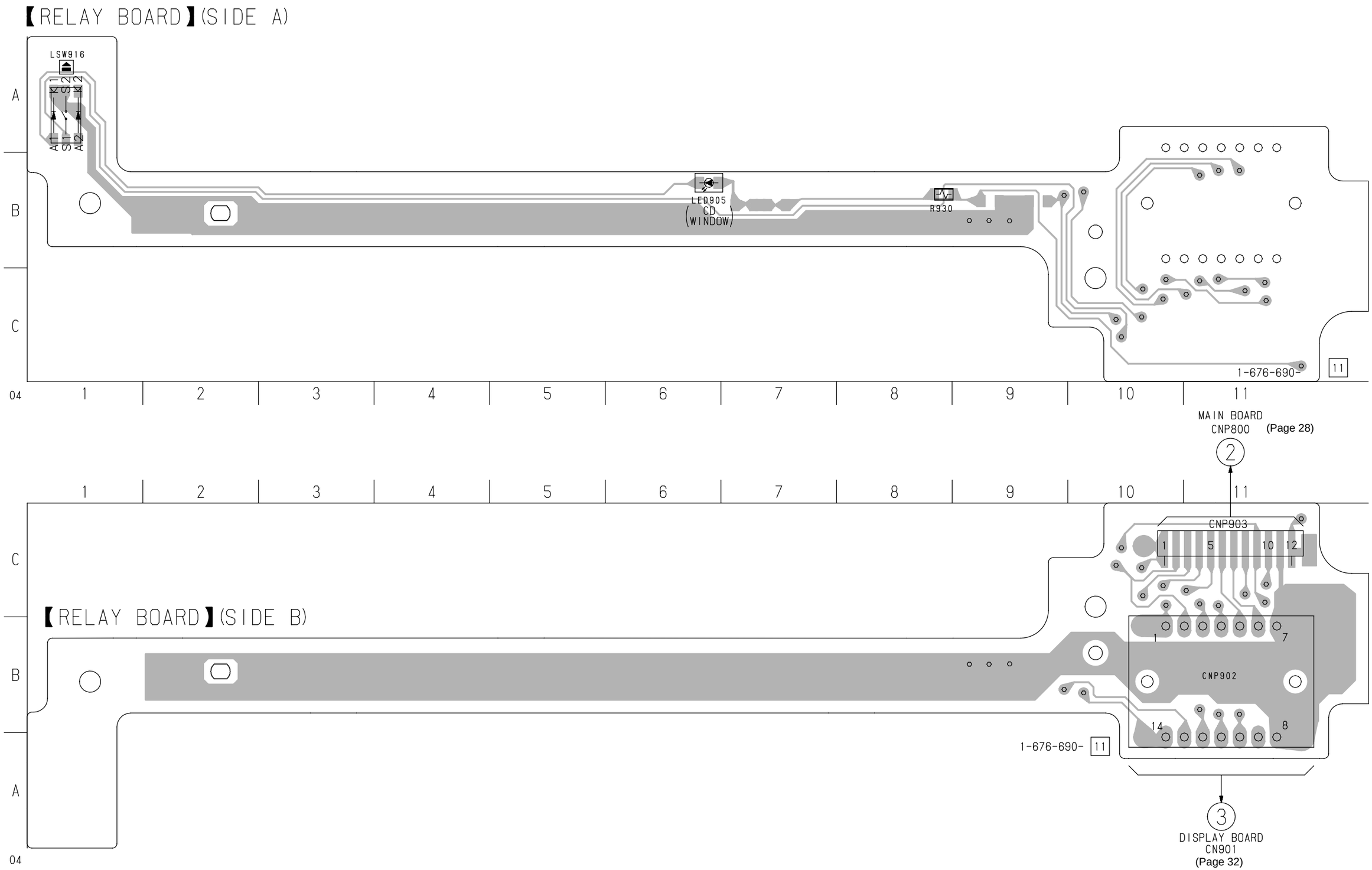
3-11. PRINTED WIRING BOARD — MAIN SECTION —



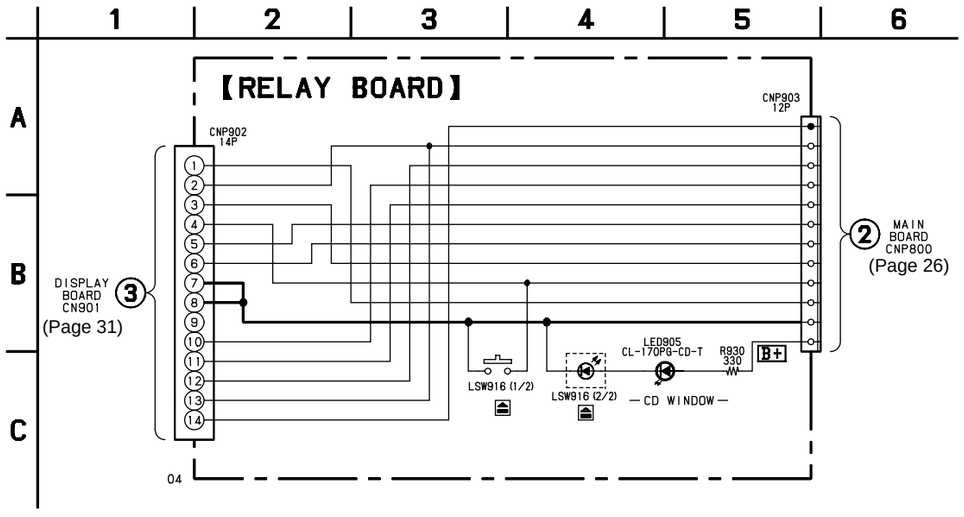
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D401	G-8	D926	C-7
D402	H-7	D927	C-7
D404	C-5	D928	C-7
D405	F-7	D930	D-10
D601	I-1		
D603	I-2	IC101	B-8
D701	E-14	IC701	H-4
D702	I-5	IC801	I-8
D801	H-9	IC901	F-13
D802	H-10	IC902	J-12
D807	F-12		
D810	J-3	Q101	C-5
D811	J-3	Q102	C-3
D812	J-3	Q201	C-5
D813	J-3	Q202	C-4
D814	J-3	Q401	G-6
D815	J-3	Q402	G-7
D816	J-4	Q601	I-1
D817	J-4	Q602	J-2
D818	J-4	Q603	J-1
D822	B-14	Q701	E-13
D823	B-13	Q702	F-13
D901	B-11	Q703	D-13
D902	D-11	Q902	D-7
D903	C-11	Q903	C-14
D904	G-12	Q904	H-14
D905	H-14	Q905	E-7
D906	I-14	Q906	F-8
D907	E-12	Q907	I-13
D909	F-12	Q908	H-12
D910	F-8	Q911	K-13
D911	D-7	Q912	I-12
D913	K-8	Q913	C-14
D914	D-8	Q914	K-7
D915	J-5	Q915	J-5
D917	D-7	Q916	E-7
D918	B-14	Q917	G-11
D921	C-8	Q918	G-12
D922	C-8	Q919	I-12
D923	C-8	Q920	B-13
D924	C-8	Q921	C-10
D925	C-7	Q922	G-14

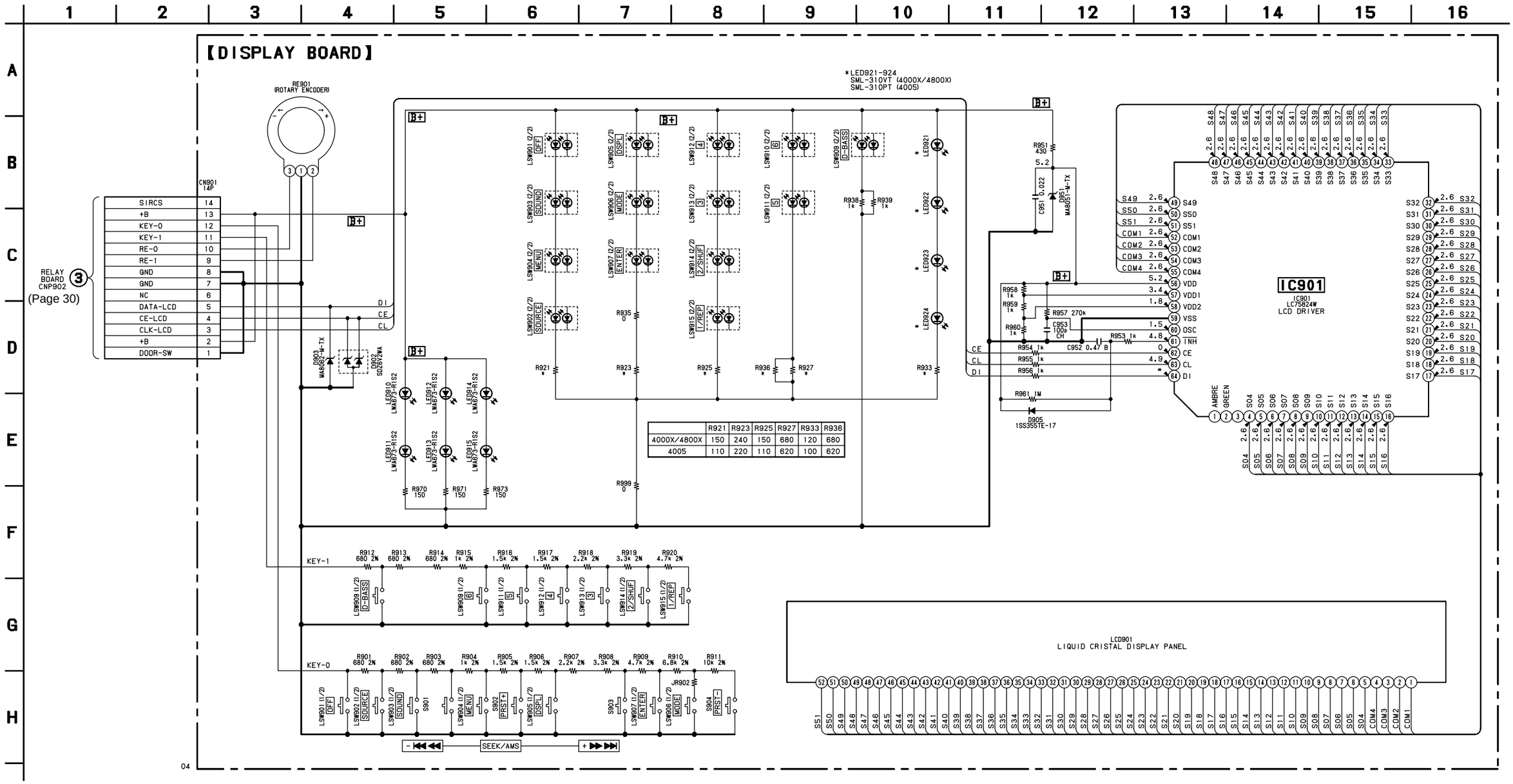
3-12. PRINTED WIRING BOARD — RELAY SECTION —



3-13. SCHEMATIC DIAGRAM — RELAY SECTION —



3-14. SCHEMATIC DIAGRAM — DISPLAY SECTION —

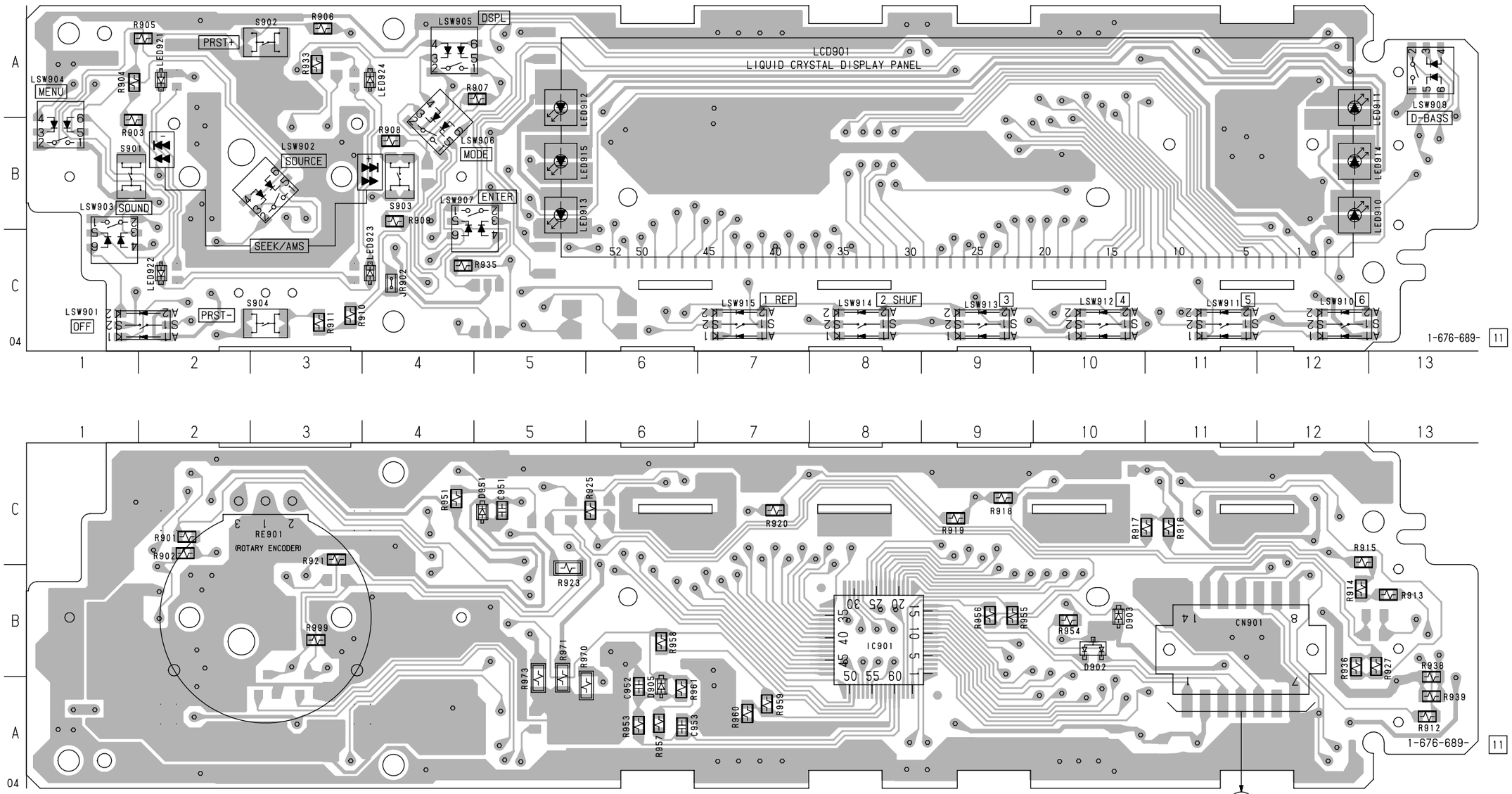


Note:

- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM

3-15. PRINTED WIRING BOARD — DISPLAY SECTION —

【DISPLAY BOARD】(SIDE A)



【DISPLAY BOARD】(SIDE B)

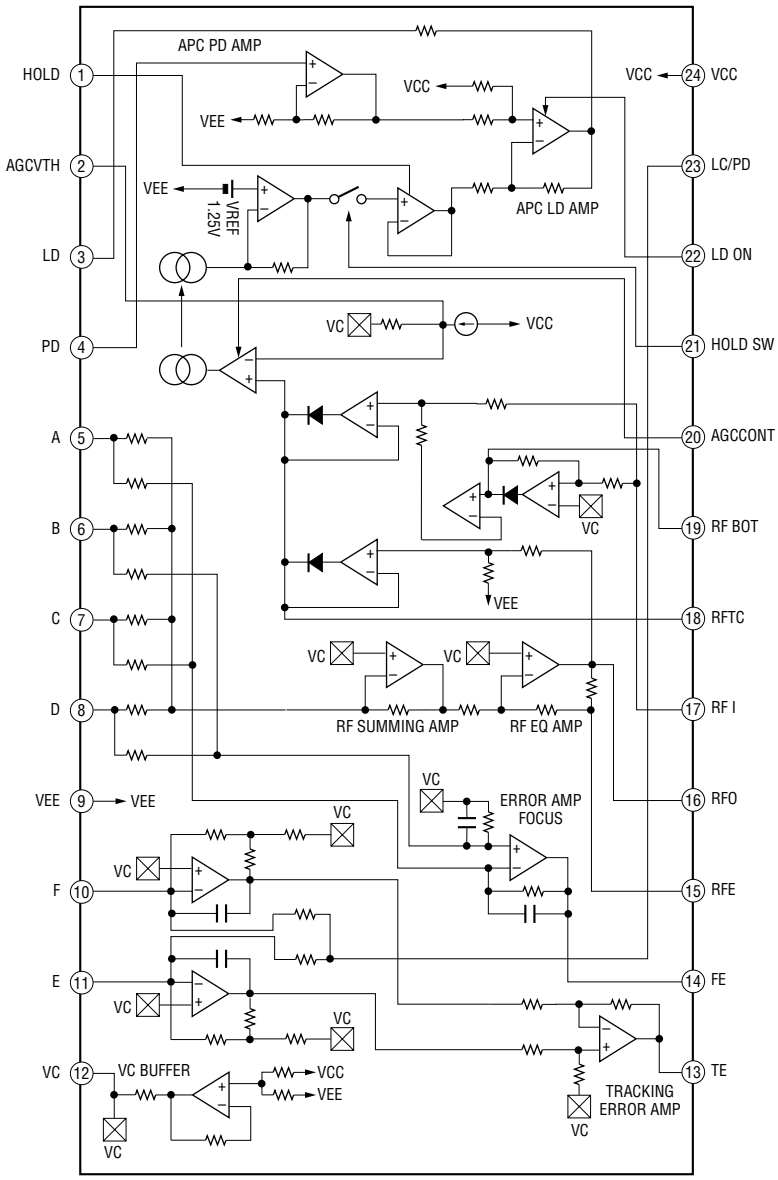
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
(D902)	B-10	LED912	A-5
(D903)	B-10	LED913	B-5
(D905)	A-6	LED914	B-13
(D951)	C-5	LED915	B-5
		LED921	A-2
(IC901)	B-8	LED922	C-2
		LED923	C-4
LED910	B-13	LED924	A-4
LED911	A-13		

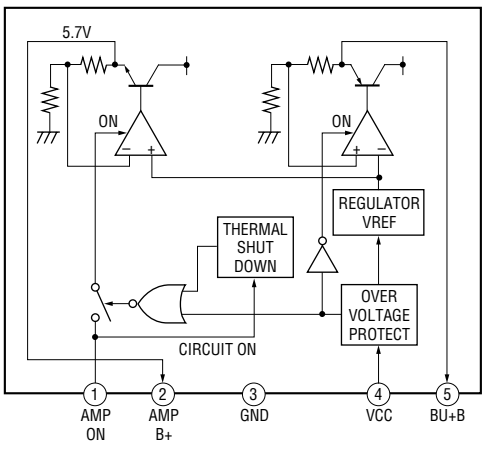
( ) : SIDE B

3-16. IC BLOCK DIAGRAMS

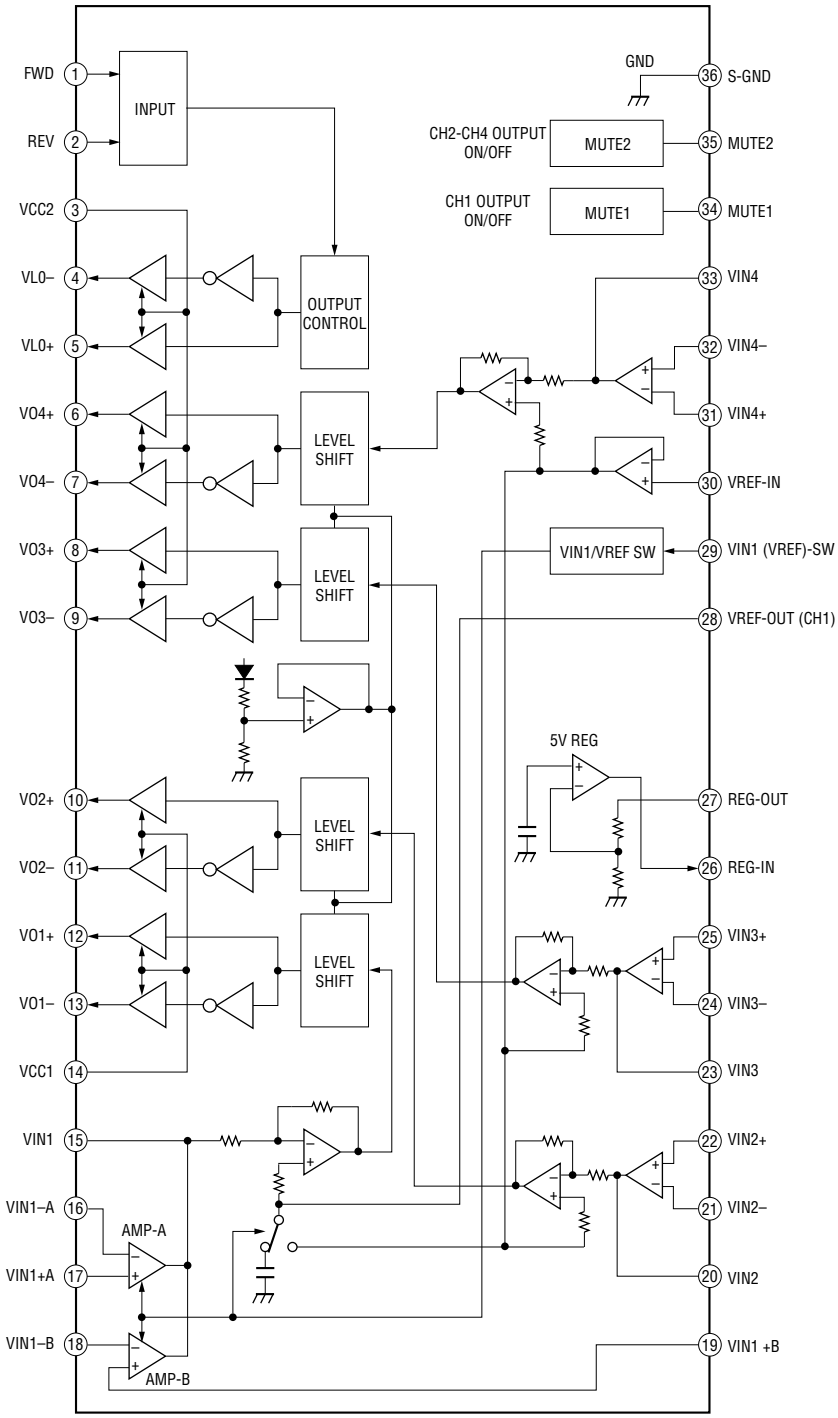
IC1 CXA2596M-T6



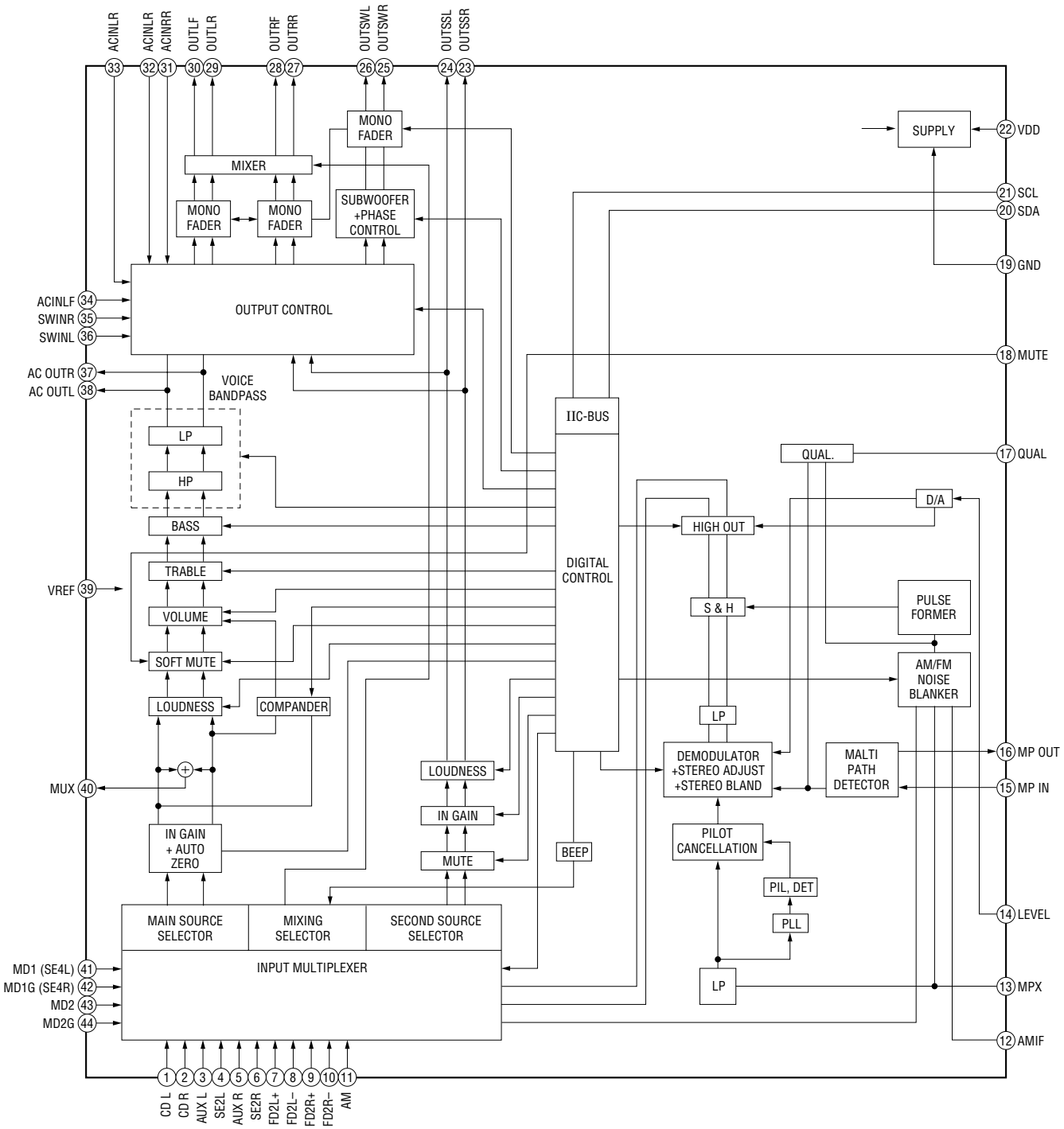
IC901 BA4903ST-V5



IC7 LA6556


FWD 1
REV 2
VCC2 3
VL0– 4
VL0+ 5
VO4+ 6
VO4– 7
VO3+ 8
VO3– 9
VO2+ 10
VO2– 11
VO1+ 12
VO1– 13
VCC1 14
VIN1 15
VIN1–A 16
VIN1+A 17
VIN1–B 18
INPUT
OUTPUT CONTROL
LEVEL SHIFT
LEVEL SHIFT
LEVEL SHIFT
LEVEL SHIFT
AMP-A
AMP-B
GND
36 S-GND
CH2-CH4 OUTPUT ON/OFF
MUTE2
35 MUTE2
CH1 OUTPUT ON/OFF
MUTE1
34 MUTE1
33 VIN4
32 VIN4–
31 VIN4+
30 VREF-IN
VIN1/VREF SW
29 VIN1 (VREF)-SW
28 VREF-OUT (CH1)
5V REG
27 REG-OUT
26 REG-IN
25 VIN3+
24 VIN3–
23 VIN3
22 VIN2+
21 VIN2–
20 VIN2
19 VIN1 +B

IC701 TDA7402TR



SECTION 4
EXPLODED VIEWS

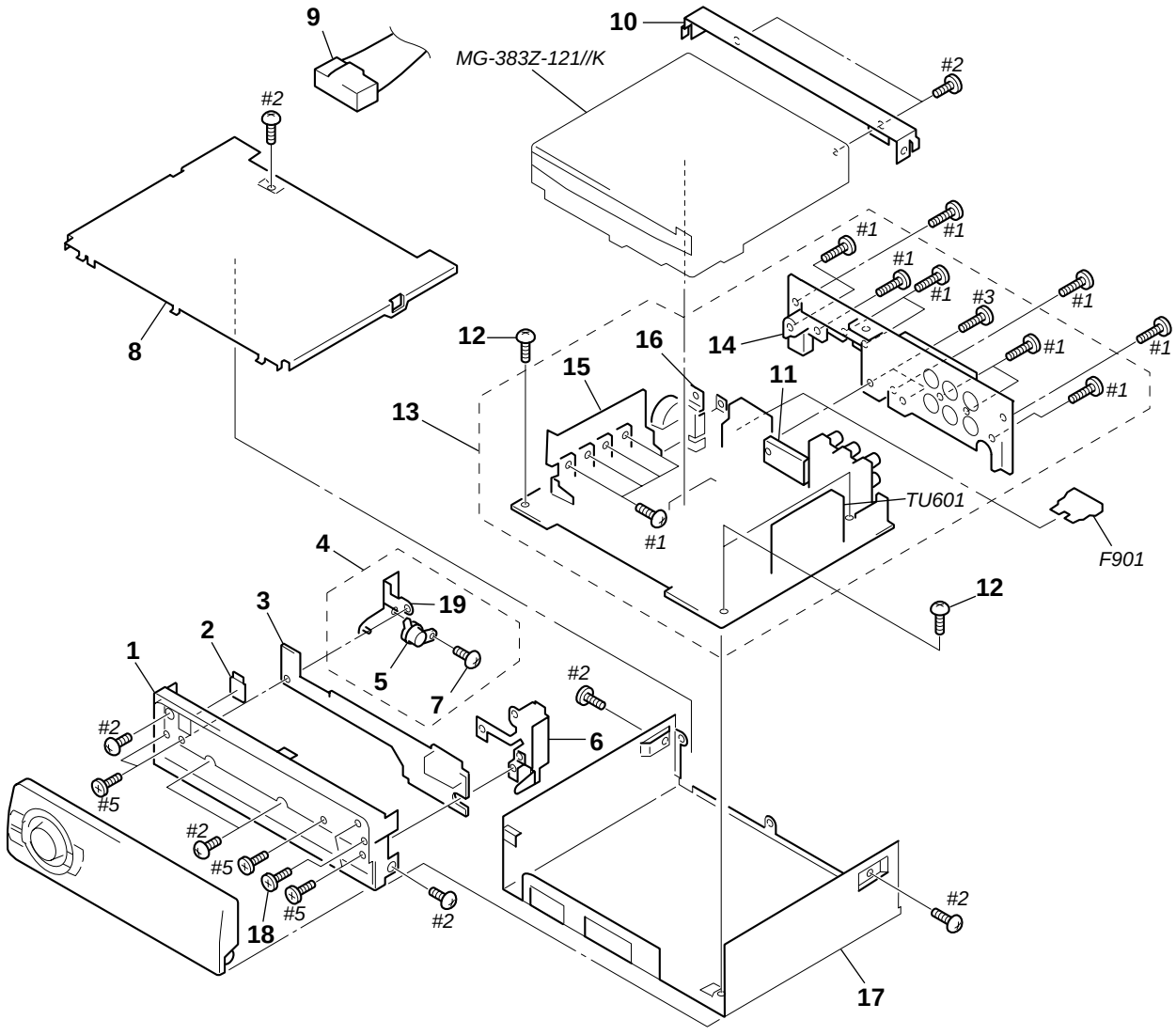
NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

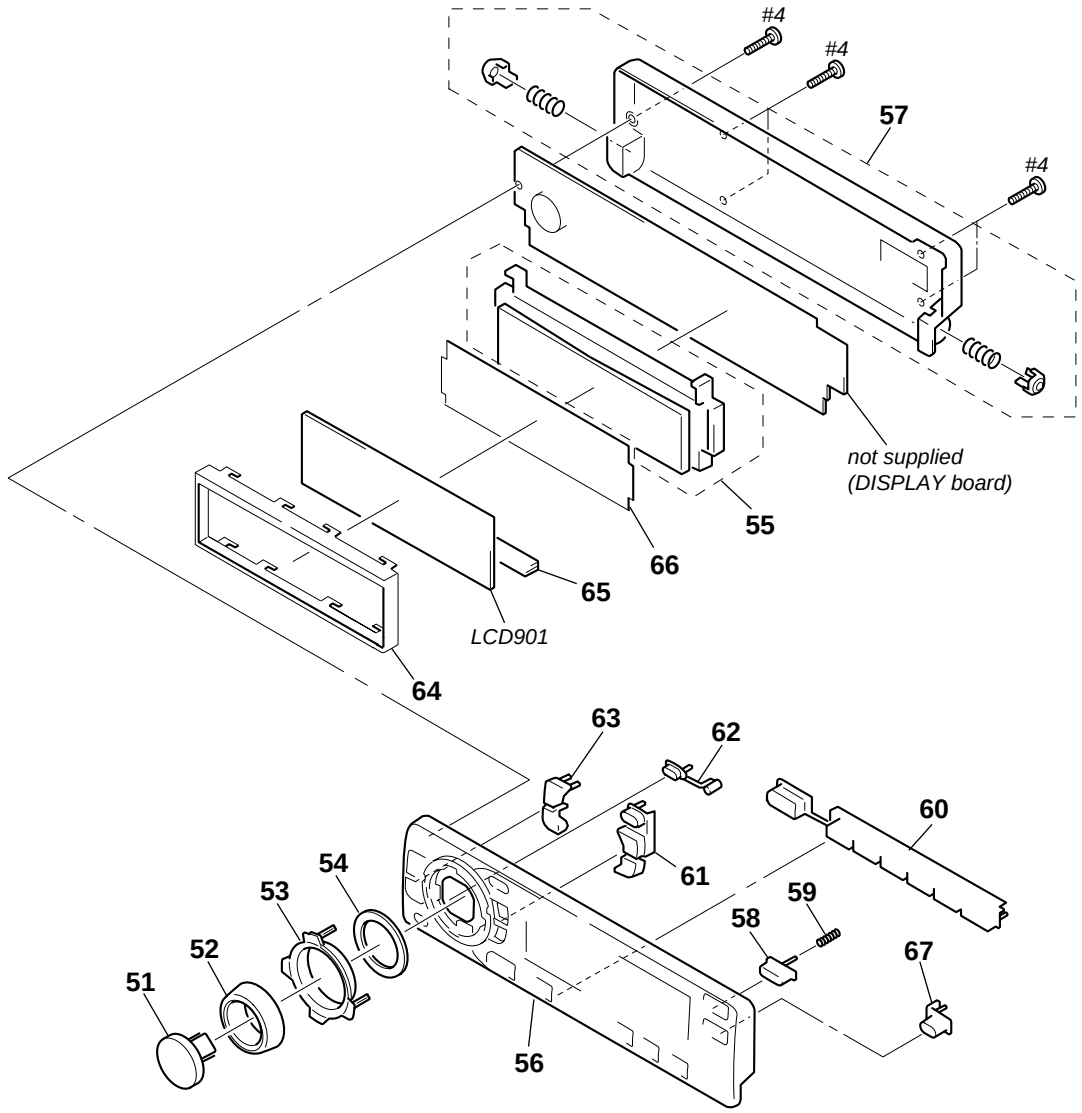
4-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	X-3378-387-1	PANEL ASSY (CD), SUB	
2	3-041-039-01	BUTTON (EJECT)	
* 3	1-676-690-11	RELAY BOARD	
4	X-3376-686-2	GEAR ASSY	
5	3-030-909-02	DAMPER, OIL	
6	X-3376-687-1	LOCK ASSY	
7	3-713-786-51	SCREW +P 2X3	
* 8	3-041-156-01	COVER	
9	1-792-194-21	CORD (WITH CONNECTOR) (POWER)	
* 10	3-041-173-01	BRACKET (CD)	
* 11	3-019-565-01	BRACKET (IC)	
12	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	

Ref. No.	Part No.	Description	Remark
* 13	A-3294-800-A	MAIN BOARD, COMPLETE (4005)	
* 13	A-3294-871-A	MAIN BOARD, COMPLETE (4800X)	
* 13	A-3294-878-A	MAIN BOARD, COMPLETE (4000X)	
* 14	3-041-176-01	HEAT SINK (4P)	
* 15	3-041-174-01	HEAT SINK (REG)	
* 16	3-041-261-01	BRACKET (TR)	
* 17	3-041-155-01	CHASSIS	
18	3-035-250-02	SCREW (LOCK)	
* 19	X-3376-689-1	BRACKET (GEAR) ASSY	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TU601	A-3220-738-A	TUNER UNIT (TUX-020)	

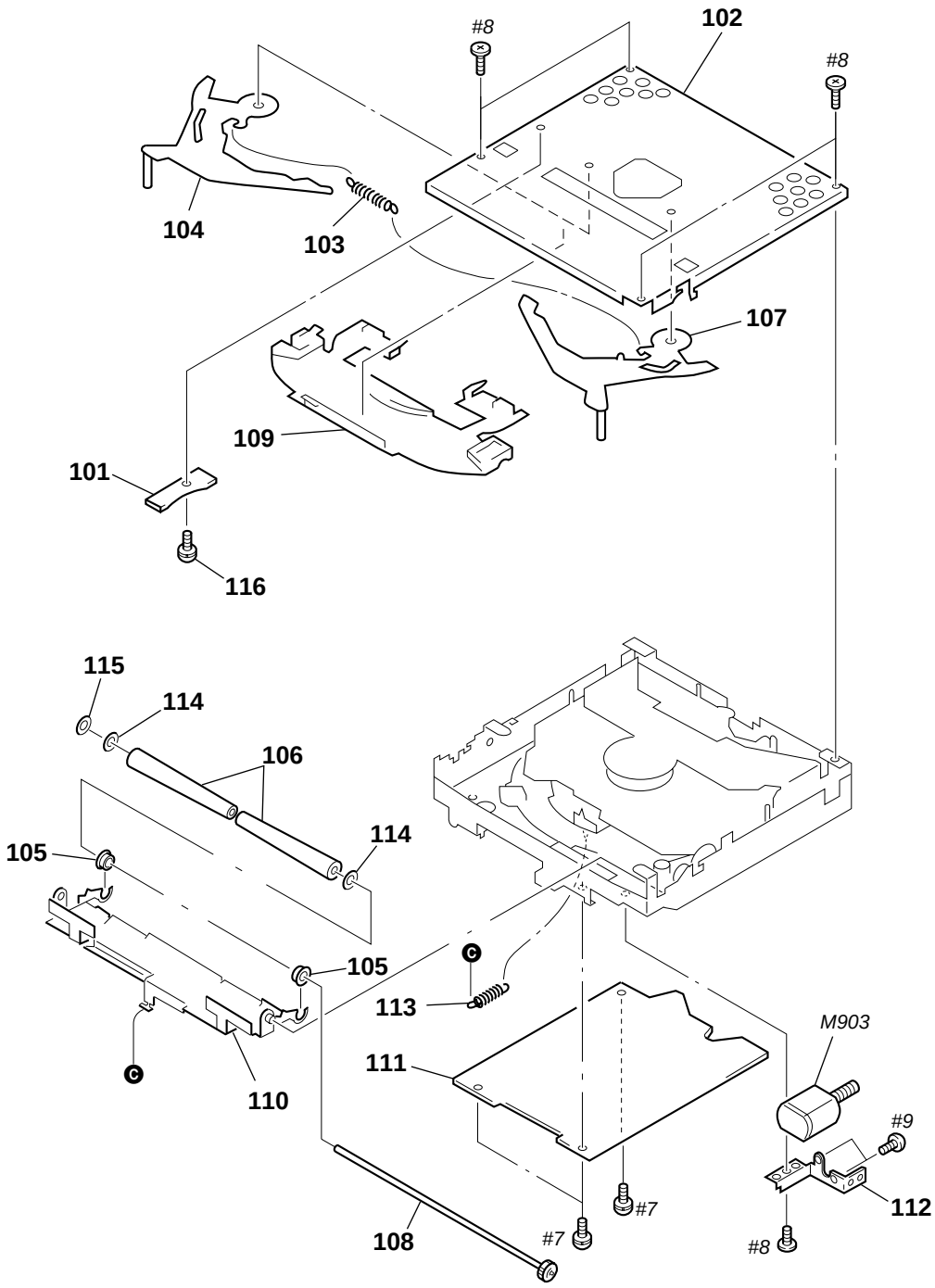
4-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-041-028-01	BUTTON (SOURCE)	
52	3-041-029-01	KNOB (VOL) (4000X/4005)	
52	3-041-029-11	KNOB (VOL) (4800X)	
53	3-041-030-31	BUTTON (CROSS)	
54	3-042-967-01	CUSHION (CROSS)	
* 55	X-3378-426-1	HOLDER (LCD) ASSY	
56	X-3378-393-1	PANEL (S) ASSY, FRONT (4005)	
56	X-3378-603-1	PANEL (S) ASSY, FRONT (4000X)	
56	X-3378-604-1	PANEL (S) ASSY, FRONT (4800X)	
57	X-3378-391-1	PANEL ASSY, FRONT BACK	
58	3-041-037-01	BUTTON (OPEN)	
59	3-032-321-01	SPRING (OPEN)	

Ref. No.	Part No.	Description	Remark
60	3-041-036-11	BUTTON (1-6/M)	
61	3-042-984-01	BUTTON (MODE/ENTER)	
62	3-041-035-01	BUTTON (OFF)	
63	3-041-034-01	BUTTON (MENU/SOUND)	
* 64	3-041-175-01	PLATE (LCD), GROUND	
65	1-694-660-11	CONDUCTIVE BOARD, CONNECTION	
* 66	3-041-372-01	SHEET (REFLECTOR)	
67	3-041-038-01	BUTTON (D)	
LCD901	1-803-907-21	DISPLAY PANEL, LIQUID CRYSTAL (4005)	
LCD901	1-803-907-41	DISPLAY PANEL, LIQUID CRYSTAL (4000X/4800X)	

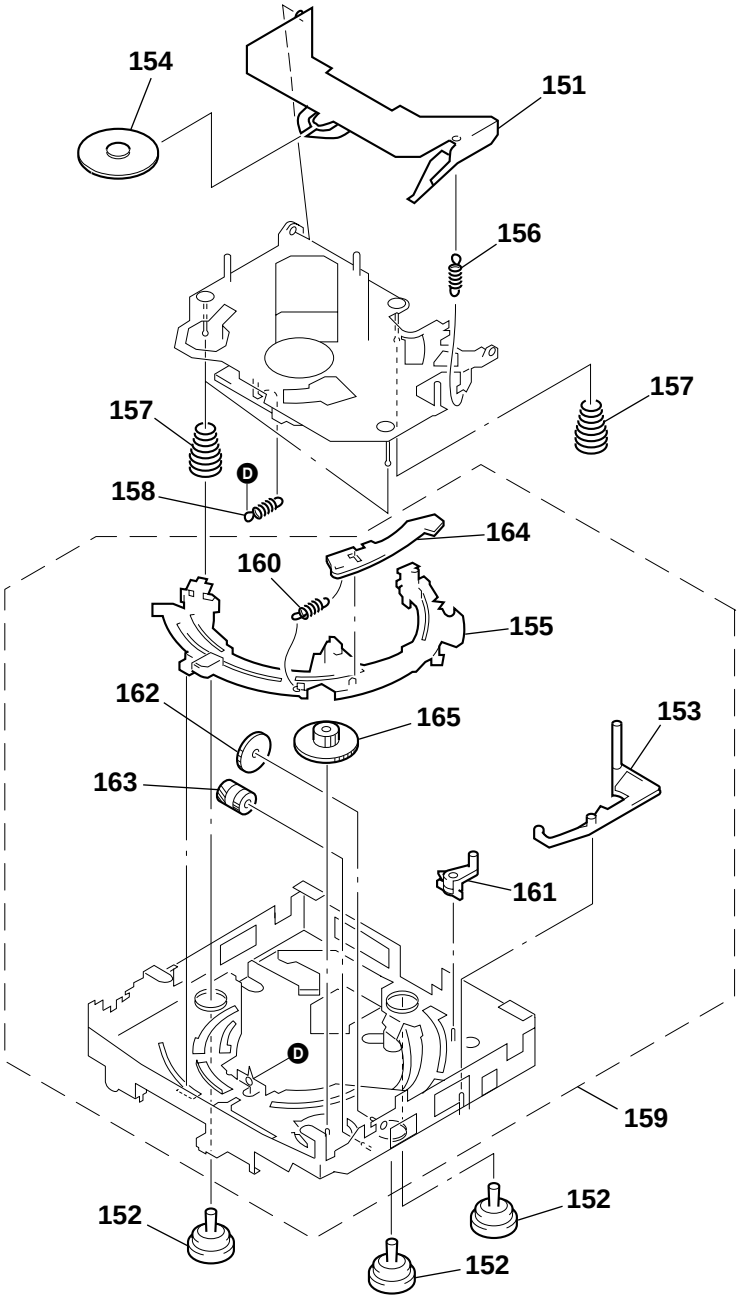
4-3. CD MECHANISM SECTION (1)
(MG-383Z-121//K)



Ref. No.	Part No.	Description	Remark
* 101	1-676-709-11	DISC IN SW BOARD	
102	3-040-039-01	CHASSIS (T)	
103	3-040-038-01	SPRING (LR), TENSION	
104	3-040-050-01	LEVER (L)	
105	3-040-022-01	RETAINER (RA), SHAFT	
106	3-040-044-01	ROLLER (S)	
107	3-040-067-01	LEVER (R)	
108	A-3301-980-A	SHAFT ROLLER ASSY	
109	3-040-037-01	GUIDE (DISC)	

Ref. No.	Part No.	Description	Remark
110	3-040-040-01	ARM (ROLLER)	
* 111	A-3294-809-A	SERVO BOARD, COMPLETE	
* 112	3-040-048-01	BRACKET (MOTOR)	
113	3-040-034-01	SPRING (RA), TENSION	
114	3-040-042-01	WASHER	
115	3-043-880-01	RING (RA), RETAING	
116	3-338-737-01	SCREW (2X3), PS	
M903	A-3301-978-A	MOTOR SUB ASSY, LO (LOADING)	

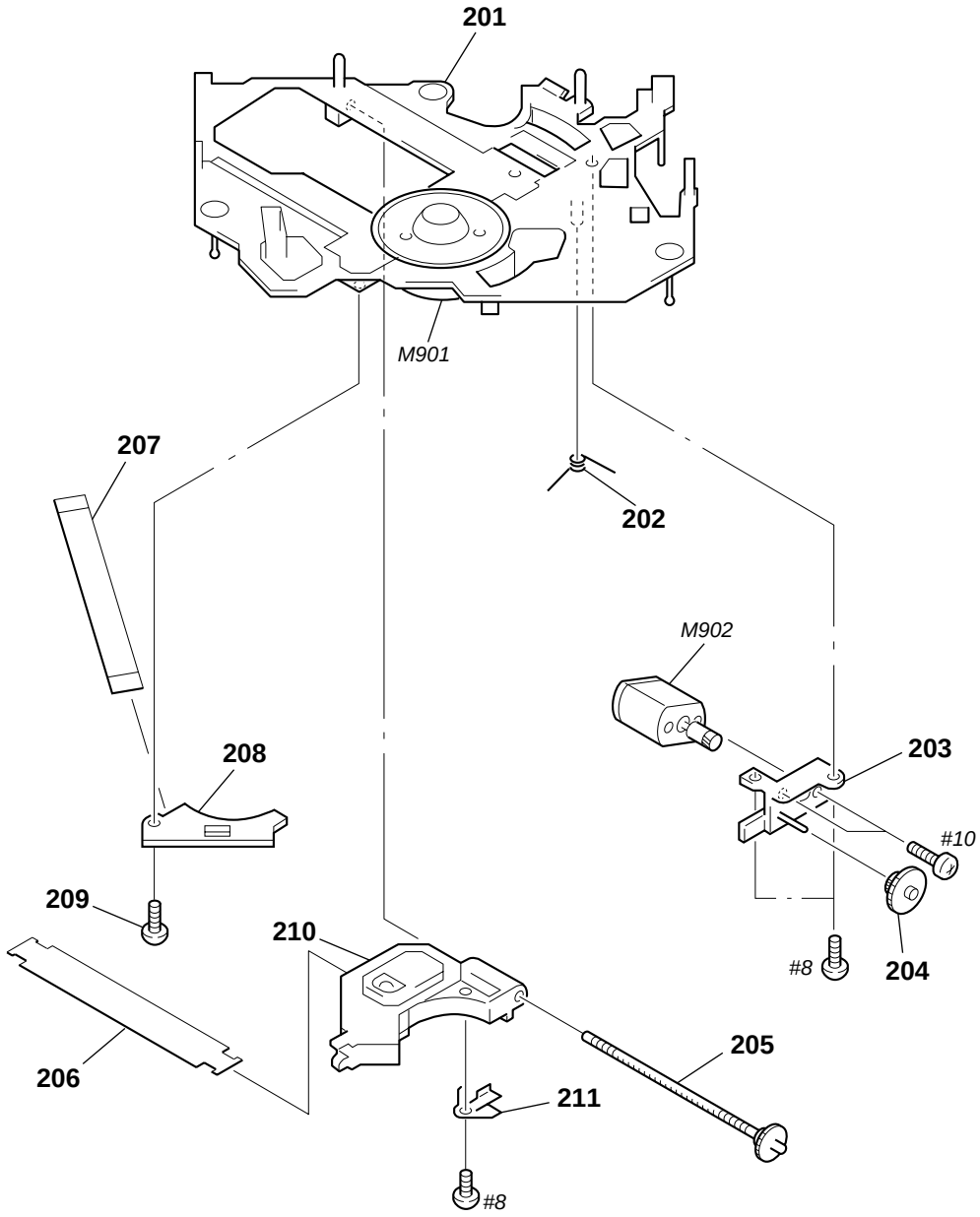
4-4. CD MECHANISM SECTION (2)
(MG-383Z-121//K)



Ref. No.	Part No.	Description	Remark
151	3-040-025-01	ARM, CHUCKING	
152	3-040-031-01	DAMPER (T)	
153	3-040-056-01	LEVER (D)	
154	3-040-024-01	RETAINER (DISC)	
155	3-040-053-01	RING, LOADING	
156	3-040-026-01	SPRING (CH), TENSION	
157	3-040-032-01	SPRING (FL), COMPRESSION	
158	3-040-033-01	SPRING (KF1), TENSION	

Ref. No.	Part No.	Description	Remark
159	A-3307-422-A	CHASSIS (M) COMPLETE ASSY	
160	3-040-059-01	SPRING (TR), TENSION	
161	3-040-057-01	LEVER (LOCK)	
162	3-040-058-01	GEAR (MDL)	
163	3-040-052-01	WHEEL (U), WORM	
164	3-040-051-01	LEVER (TR)	
165	3-040-054-01	WHEEL (LW), WORM	

4-5. CD MECHANISM SECTION (3)
(MG-383Z-121//K)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
* 201	X-3378-480-1	CHASSIS (OP) ASSY (INCLUDING M901)	
202	3-040-029-01	SPRING (SL), TORSION	
203	3-040-045-01	BASE (DRIVING)	
204	3-040-194-01	GEAR (SL MIDWAY)	
205	A-3301-983-A	SHAFT (FEED) ASSY	
206	1-676-707-11	PICK-UP FLEXIBLE BOARD	
207	1-677-182-11	MOTOR FLEXIBLE BOARD	
* 208	1-676-708-11	LIMIT SW BOARD	
209	3-909-607-01	SCREW	
⚠210	8-820-103-03	PICK-UP, OPTICAL KSS-720A/K1RP	
211	3-040-030-01	SPRING (FEED), PLATE	
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)	

SECTION 5
ELECTRICAL PARTS LIST

DISC IN SW **DISPLAY**

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	1-676-709-11	DISC IN SW BOARD			
		**********			
		< SWITCH >			
SW2	1-529-566-21	SWITCH, PUSH (1 KEY) (SELF)			
SW3	1-529-566-21	SWITCH, PUSH (1 KEY) (DISC IN)			
**********					
		DISPLAY BOARD			
		**********			
	1-694-660-11	CONDUCTIVE BOARD, CONNECTION			
*	3-041-175-01	PLATE (LCD), GROUND			
*	3-041-372-01	SHEET (REFLECTOR)			
		< CAPACITOR >			
C951	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C952	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C953	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN901	1-794-065-11	PLUG, CONNECTOR 14P			
		< DIODE >			
D902	8-719-068-68	DIODE SDZ6V2WA			
D903	8-719-422-64	DIODE MA8062-M-TX			
D905	8-719-988-61	DIODE 1SS355TE-17			
D951	8-719-420-90	DIODE MA8051-M-TX			
		< IC >			
IC901	8-759-365-90	IC LC75824W			
		< JUMPER RESISTOR >			
JR902	1-216-295-00	SHORT	0		
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-803-907-21	DISPLAY PANEL, LIQUID CRYSTAL (4005)			
LCD901	1-803-907-41	DISPLAY PANEL, LIQUID CRYSTAL			(4000X/4800X)
		< DIODE >			
LED910	8-719-078-19	LED LWA673-R1S2			
LED911	8-719-078-19	LED LWA673-R1S2			
LED912	8-719-078-19	LED LWA673-R1S2			
LED913	8-719-078-19	LED LWA673-R1S2			

Ref. No.	Part No.	Description	Remark
LED914	8-719-078-19	LED LWA673-R1S2	
LED915	8-719-078-19	LED LWA673-R1S2	
LED921	8-719-078-21	LED SML-310PT (4005)	
LED921	8-719-078-83	LED SML-310VT (4000X/4800X)	
LED922	8-719-078-21	LED SML-310PT (4005)	
LED922	8-719-078-83	LED SML-310VT (4000X/4800X)	
LED923	8-719-078-21	LED SML-310PT (4005)	
LED923	8-719-078-83	LED SML-310VT (4000X/4800X)	
LED924	8-719-078-21	LED SML-310PT (4005)	
LED924	8-719-078-83	LED SML-310VT (4000X/4800X)	
		< SWITCH >	
LSW901	1-771-609-11	SWITCH, TACTILE (WITH LED) (OFF) (4005)	
LSW901	1-771-883-21	SWITCH, TACTILE (WITH LED) (OFF)	(4000X/4800X)
LSW902	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (SOURCE)	(4005)
LSW902	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (SOURCE)	(4000X/4800X)
LSW903	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (SOUND)	(4005)
LSW903	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (SOUND)	(4000X/4800X)
LSW904	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (MENU)	(4005)
LSW904	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (MENU)	(4000X/4800X)
LSW905	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (DSPL)	(4005)
LSW905	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (DSPL)	(4000X/4800X)
LSW906	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (LIST)	(4005)
LSW906	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (LIST)	(4000X/4800X)
LSW907	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (ENTER)	(4005)
LSW907	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (ENTER)	(4000X/4800X)
LSW909	1-762-737-11	SWITCH, KEY BOARD (WITH LED) (D-BASS)	
LSW910	1-771-609-11	SWITCH, TACTILE (WITH LED) (6) (4005)	
LSW910	1-771-883-21	SWITCH, TACTILE (WITH LED) (6)	(4000X/4800X)
LSW911	1-771-609-11	SWITCH, TACTILE (WITH LED) (5) (4005)	
LSW911	1-771-883-21	SWITCH, TACTILE (WITH LED) (5)	(4000X/4800X)
LSW912	1-771-609-11	SWITCH, TACTILE (WITH LED) (4) (4005)	

DISPLAY　LIMIT SW

Ref. No.	Part No.	Description			Remark
LSW912	1-771-883-21	SWITCH, TACTILE (WITH LED) (4)			(4000X/4800X)
LSW913	1-771-609-11	SWITCH, TACTILE (WITH LED) (3) (4005)			
LSW913	1-771-883-21	SWITCH, TACTILE (WITH LED) (3)			(4000X/4800X)
LSW914	1-771-609-11	SWITCH, TACTILE (WITH LED) (2 SHUF)			(4005)
LSW914	1-771-883-21	SWITCH, TACTILE (WITH LED) (2 SHUF)			(4000X/4800X)
LSW915	1-771-609-11	SWITCH, TACTILE (WITH LED) (1 REP)			(4005)
LSW915	1-771-883-21	SWITCH, TACTILE (WITH LED) (1 REP)			(4000X/4800X)
		< RESISTOR >			
R901	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R902	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R903	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R904	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R905	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R906	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R907	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R908	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R909	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R910	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R911	1-208-806-11	RES-CHIP	10K	2%	1/10W
R912	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R913	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R914	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R915	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R916	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R917	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R918	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R919	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R920	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R921	1-216-026-11	RES-CHIP	110	5%	1/10W (4005)
R921	1-216-029-00	METAL CHIP	150	5%	1/10W (4000X/4800X)
R923	1-216-182-00	RES-CHIP	220	5%	1/8W (4005)
R923	1-216-183-00	RES-CHIP	240	5%	1/8W (4000X/4800X)
R925	1-216-026-11	RES-CHIP	110	5%	1/10W (4005)
R925	1-216-029-00	METAL CHIP	150	5%	1/10W (4000X/4800X)
R927	1-216-044-00	METAL CHIP	620	5%	1/10W (4005)
R927	1-216-045-00	METAL CHIP	680	5%	1/10W (4000X/4800X)
R933	1-216-025-11	RES-CHIP	100	5%	1/10W (4005)
R933	1-216-027-11	RES-CHIP	120	5%	1/10W (4000X/4800X)
R935	1-216-295-00	SHORT	0		
R936	1-216-044-00	METAL CHIP	620	5%	1/10W (4005)
R936	1-216-045-00	METAL CHIP	680	5%	1/10W (4000X/4800X)
R938	1-216-049-11	RES-CHIP	1K	5%	1/10W
R939	1-216-049-11	RES-CHIP	1K	5%	1/10W
R951	1-216-040-00	RES-CHIP	430	5%	1/10W
R953	1-216-049-11	RES-CHIP	1K	5%	1/10W
R954	1-216-049-11	RES-CHIP	1K	5%	1/10W
R955	1-216-049-11	RES-CHIP	1K	5%	1/10W
R956	1-216-049-11	RES-CHIP	1K	5%	1/10W
R957	1-216-107-00	METAL CHIP	270K	5%	1/10W
R958	1-216-049-11	RES-CHIP	1K	5%	1/10W
R959	1-216-049-11	RES-CHIP	1K	5%	1/10W
R960	1-216-049-11	RES-CHIP	1K	5%	1/10W
R961	1-216-121-11	RES-CHIP	1M	5%	1/10W
R970	1-216-178-00	RES-CHIP	150	5%	1/8W
R971	1-216-178-00	RES-CHIP	150	5%	1/8W
R973	1-216-178-00	RES-CHIP	150	5%	1/8W
R999	1-216-295-00	SHORT	0		
		< ROTARY ENCODER >			
RE901	1-475-014-11	ENCODER, ROTARY			
		< SWITCH >			
S901	1-771-884-21	SWITCH, TACTILE (WITH LED) (SEEK/AMS – ⏮ ◀◀)			
S902	1-771-884-21	SWITCH, TACTILE (WITH LED) (PRST +)			
S903	1-771-884-21	SWITCH, TACTILE (WITH LED) (SEEK/AMS + ▶▶ ⏭)			
S904	1-771-884-21	SWITCH, TACTILE (WITH LED) (PRST –)			
**********					
*	1-676-708-11	LIMIT SW BOARD			
		**********			
		< CONNECTOR >			
CN13	1-770-347-21	CONNECTOR, FPC 6P			
		< SWITCH >			
SW4	1-529-565-11	SWITCH, PUSH (1 KEY) (LIMIT)			
**********					

Ref. No.	Part No.	Description			Remark
*	A-3294-800-A	MAIN BOARD, COMPLETE (4005)			
*	A-3294-871-A	MAIN BOARD, COMPLETE (4800X)			
*	A-3294-878-A	MAIN BOARD, COMPLETE (4000X)			
		**********			
*	3-019-565-01	BRACKET (IC)			
*	3-041-174-01	HEAT SINK (REG)			
*	3-041-176-01	HEAT SINK (4P)			
*	3-041-261-01	BRACKET (TR)			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			
		< CAPACITOR >			
C101	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C102	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C104	1-164-346-11	CERAMIC CHIP	1uF		16V
C110	1-124-233-11	ELECT	10uF	20%	16V
C111	1-124-233-11	ELECT	10uF	20%	16V
C112	1-164-346-11	CERAMIC CHIP	1uF		16V
C124	1-164-346-11	CERAMIC CHIP	1uF		16V
C126	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C201	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C202	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C204	1-164-346-11	CERAMIC CHIP	1uF		16V
C210	1-124-233-11	ELECT	10uF	20%	16V
C211	1-124-233-11	ELECT	10uF	20%	16V
C212	1-164-346-11	CERAMIC CHIP	1uF		16V
C224	1-164-346-11	CERAMIC CHIP	1uF		16V
C226	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C403	1-119-774-11	ELECT	100uF	20%	16V
C404	1-124-233-11	ELECT	10uF	20%	16V
C405	1-124-233-11	ELECT	10uF	20%	16V
C415	1-124-259-11	ELECT	4.7uF	20%	16V
C426	1-164-346-11	CERAMIC CHIP	1uF		16V
C427	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C428	1-164-343-11	CERAMIC CHIP	0.056uF	10%	25V
C429	1-164-346-11	CERAMIC CHIP	1uF		16V
C431	1-135-473-11	ELECT	3300uF	20%	16V
C435	1-126-786-11	ELECT	47uF	20%	16V
C601	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C602	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C603	1-124-443-00	ELECT	100uF	20%	10V
C604	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C605	1-124-233-11	ELECT	10uF	20%	16V
C607	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C609	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C610	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C614	1-162-306-11	CERAMIC CHIP	0.01uF	30%	16V
C703	1-124-253-11	ELECT	0.47uF	20%	50V
C704	1-128-057-11	ELECT	330uF	20%	6.3V
C705	1-164-346-11	CERAMIC CHIP	1uF		16V
C706	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C707	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V

Ref. No.	Part No.	Description			Remark
C708	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C709	1-126-176-11	ELECT	220uF	20%	10V
C713	1-164-346-11	CERAMIC CHIP	1uF		16V
C714	1-124-584-00	ELECT	100uF	20%	10V
C719	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C720	1-164-346-11	CERAMIC CHIP	1uF		16V
C721	1-164-346-11	CERAMIC CHIP	1uF		16V
C722	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C723	1-163-017-00	CERAMIC CHIP	0.0047uF	10%	50V
C802	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C803	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C804	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C805	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C806	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C807	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C808	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C809	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C810	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C811	1-163-259-11	CERAMIC CHIP	220PF	5%	50V
C812	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C813	1-164-346-11	CERAMIC CHIP	1uF		16V
C814	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C901	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C904	1-124-584-00	ELECT	100uF	20%	10V
C905	1-124-233-11	ELECT	10uF	20%	16V
C906	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C907	1-124-465-00	ELECT	0.47uF	20%	50V
C908	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C910	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C913	1-126-960-11	ELECT	1uF	20%	50V
C914	1-128-647-11	DOUBLE LAYERS	0.1F		5.5V
C920	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C921	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C922	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
CN701	1-764-617-12	PIN, CONNECTOR (PC BOARD) 30P			
CNP501	1-774-701-11	PIN, CONNECTOR 16P			
CNP800	1-770-520-31	CONNECTOR, FFC/FPC 12P			
		< JACK >			
CNJ600	1-793-598-11	JACK (ANTENNA)			
CNP802	1-764-270-21	JACK (REMOTE IN)			
		< DIODE >			
D401	8-719-988-61	DIODE 1SS355TE-17			
D402	8-719-991-33	DIODE 1SS133T-77			
D404	8-719-422-16	DIODE MA8039-L-TX			
D405	8-719-988-61	DIODE 1SS355TE-17			
D601	8-719-921-44	DIODE MTZJ-T-77-5.1C			
D603	8-719-988-61	DIODE 1SS355TE-17			
D701	8-719-109-98	DIODE MTZJ-T-77-5.6C			
D702	8-719-058-24	DIODE RB501V-40TE-17			

MAIN

Ref. No.	Part No.	Description	Remark
D801	8-719-991-33	DIODE 1SS133T-77	
D802	8-719-991-33	DIODE 1SS133T-77	
D807	8-719-109-97	DIODE MTZJ-T-77-6.8B	
D810	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D811	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D812	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D813	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D814	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D815	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D816	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D817	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D818	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D822	8-719-977-12	DIODE MA8068-M-TX	
D823	8-719-977-12	DIODE MA8068-M-TX	
D901	8-719-200-82	DIODE 11ES2-TA1B	
D902	8-719-200-82	DIODE 11ES2-TA1B	
D903	8-719-049-38	DIODE 1N5404TU	
D904	8-719-991-33	DIODE 1SS133T-77	
D905	8-719-109-97	DIODE MTZJ-T-77-6.8B	
D906	8-719-929-15	DIODE MTZJ-T-77-9.1B	
D907	8-719-200-82	DIODE 11ES2-TA1B	
D909	8-719-991-33	DIODE 1SS133T-77	
D910	8-719-923-93	DIODE MTZJ-T-77-16C	
D911	8-719-022-90	DIODE MA8160-M-TX	
D913	8-719-988-61	DIODE 1SS355TE-17	
D914	8-719-977-12	DIODE MA8068-M-TX	
D915	8-719-914-44	DIODE DAP202K-T-146	
D917	8-719-991-33	DIODE 1SS133T-77	
D918	8-719-929-15	DIODE MTZJ-T-77-9.1B	
D921	8-719-079-42	DIODE 1ZB22(TPA3)	
D922	8-719-079-42	DIODE 1ZB22(TPA3)	
D923	8-719-079-42	DIODE 1ZB22(TPA3)	
D924	8-719-079-42	DIODE 1ZB22(TPA3)	
D925	8-719-079-42	DIODE 1ZB22(TPA3)	
D926	8-719-079-42	DIODE 1ZB22(TPA3)	
D927	8-719-079-42	DIODE 1ZB22(TPA3)	
D928	8-719-079-42	DIODE 1ZB22(TPA3)	
D930	8-719-977-12	DIODE MA8068-M-TX	
		< IC >	
IC101	8-759-663-88	IC TA8268H	
IC701	8-759-653-27	IC TDA7402TR	
IC801	8-759-664-64	IC MN101C49KTB	
IC901	8-759-572-12	IC BA4903ST-V5	
IC902	8-759-574-61	IC XC61AN4302MR	
		< JUMPER RESISTOR >	
JR101	1-216-295-00	SHORT 0	
JR102	1-216-295-00	SHORT 0	
JR110	1-216-296-00	SHORT 0	
JR111	1-216-296-00	SHORT 0	
JR201	1-216-295-00	SHORT 0	
JR202	1-216-295-00	SHORT 0	

Ref. No.	Part No.	Description	Remark
JR222	1-216-296-00	SHORT 0	
JR223	1-216-296-00	SHORT 0	
JR401	1-216-296-00	SHORT 0	
JR402	1-216-295-00	SHORT 0	
JR602	1-216-295-00	SHORT 0	
JR603	1-216-295-00	SHORT 0	
JR701	1-216-296-00	SHORT 0	
JR704	1-216-296-00	SHORT 0	
JR708	1-216-296-00	SHORT 0	
JR710	1-216-296-00	SHORT 0	
JR711	1-216-295-00	SHORT 0	
JR712	1-216-296-00	SHORT 0	
JR801	1-216-295-00	SHORT 0	
JR804	1-216-296-00	SHORT 0	
JR806	1-216-295-00	SHORT 0	
JR807	1-216-296-00	SHORT 0	
JR812	1-216-296-00	SHORT 0	
JR816	1-216-296-00	SHORT 0	
JR817	1-216-296-00	SHORT 0	
JR888	1-216-296-00	SHORT 0	
JR901	1-216-296-00	SHORT 0	
JR902	1-216-296-00	SHORT 0	
JR911	1-216-296-00	SHORT 0	
JR914	1-216-295-00	SHORT 0	
JR917	1-216-296-00	SHORT 0	
JR920	1-216-296-00	SHORT 0	
JR922	1-216-198-00	RES-CHIP 1K 5% 1/8W	
JR923	1-216-295-00	SHORT 0	
JR924	1-216-295-00	SHORT 0	
		< COIL >	
L901	1-419-476-31	COIL, CHOKE 250uH	
		< JACK >	
PJ400	1-794-067-11	JACK, PIN 4P (AUDIO OUT FRONT, AUDIO OUT REAR)	
		< TRANSISTOR >	
Q101	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q102	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q201	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q202	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q401	8-729-038-55	TRANSISTOR KRA103S	
Q402	8-729-038-68	TRANSISTOR KRC103S	
Q601	8-729-049-40	TRANSISTOR STC2412G	
Q602	8-729-049-43	TRANSISTOR STB1132Y	
Q603	8-729-038-68	TRANSISTOR KRC103S	
Q701	8-729-038-55	TRANSISTOR KRA103S	
Q702	8-729-038-68	TRANSISTOR KRC103S	
Q703	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q902	8-729-038-68	TRANSISTOR KRC103S	
Q903	8-729-038-55	TRANSISTOR KRA103S	
Q904	8-729-019-00	TRANSISTOR 2SD2394-G	

Ref. No.	Part No.	Description			Remark
Q905	8-729-049-40	TRANSISTOR	STC2412G		
Q906	8-729-049-40	TRANSISTOR	STC2412G		
Q907	8-729-038-55	TRANSISTOR	KRA103S		
Q908	8-729-038-68	TRANSISTOR	KRC103S		
Q911	8-729-038-68	TRANSISTOR	KRC103S		
Q912	8-729-049-43	TRANSISTOR	STB1132Y		
Q913	8-729-038-68	TRANSISTOR	KRC103S		
Q914	8-729-038-55	TRANSISTOR	KRA103S		
Q915	8-729-038-55	TRANSISTOR	KRA103S		
Q916	8-729-049-40	TRANSISTOR	STC2412G		
Q917	8-729-049-40	TRANSISTOR	STC2412G		
Q918	8-729-049-40	TRANSISTOR	STC2412G		
Q919	8-729-038-68	TRANSISTOR	KRC103S		
Q920	8-729-019-00	TRANSISTOR	2SD2394-G		
Q921	8-729-049-43	TRANSISTOR	STB1132Y		
Q922	8-729-019-00	TRANSISTOR	2SD2394-G		
		< RESISTOR >			
R102	1-216-089-11	RES-CHIP	47K	5%	1/10W
R103	1-216-089-11	RES-CHIP	47K	5%	1/10W
R112	1-216-025-11	RES-CHIP	100	5%	1/10W
R114	1-216-174-00	RES-CHIP	100	5%	1/8W
R115	1-216-077-00	METAL CHIP	15K	5%	1/10W
R116	1-216-226-00	RES-CHIP	15K	5%	1/8W
R117	1-216-025-11	RES-CHIP	100	5%	1/10W
R118	1-216-025-11	RES-CHIP	100	5%	1/10W
R123	1-216-089-11	RES-CHIP	47K	5%	1/10W
R124	1-216-089-11	RES-CHIP	47K	5%	1/10W
R202	1-216-089-11	RES-CHIP	47K	5%	1/10W
R203	1-216-089-11	RES-CHIP	47K	5%	1/10W
R212	1-216-174-00	RES-CHIP	100	5%	1/8W
R214	1-216-174-00	RES-CHIP	100	5%	1/8W
R215	1-216-077-00	METAL CHIP	15K	5%	1/10W
R216	1-216-077-00	METAL CHIP	15K	5%	1/10W
R217	1-216-025-11	RES-CHIP	100	5%	1/10W
R218	1-216-025-11	RES-CHIP	100	5%	1/10W
R223	1-216-089-11	RES-CHIP	47K	5%	1/10W
R224	1-216-089-11	RES-CHIP	47K	5%	1/10W
R402	1-247-879-11	CARBON	100K	5%	1/4W
R405	1-216-049-11	RES-CHIP	1K	5%	1/10W
R406	1-216-065-11	RES-CHIP	4.7K	5%	1/10W
R408	1-216-049-11	RES-CHIP	1K	5%	1/10W
R409	1-216-222-00	RES-CHIP	10K	5%	1/8W
R410	1-216-097-11	RES-CHIP	100K	5%	1/10W
R411	1-216-121-00	METAL CHIP	1M	5%	1/10W
R601	1-216-025-11	RES-CHIP	100	5%	1/10W
R602	1-216-025-11	RES-CHIP	100	5%	1/10W
R603	1-216-295-00	SHORT	0		
R604	1-216-295-00	SHORT	0		
R605	1-216-049-11	RES-CHIP	1K	5%	1/10W
R606	1-216-058-00	RES-CHIP	2.4K	5%	1/10W
R607	1-216-097-11	RES-CHIP	100K	5%	1/10W
R701	1-216-089-11	RES-CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R703	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R704	1-216-017-11	RES-CHIP	47	5%	1/10W
R705	1-216-304-11	METAL CHIP	3.3	5%	1/10W
R706	1-216-001-00	METAL CHIP	10	5%	1/10W
R707	1-216-041-00	METAL CHIP	470	5%	1/10W
R710	1-216-089-11	RES-CHIP	47K	5%	1/10W
R711	1-216-085-00	METAL CHIP	33K	5%	1/10W
R712	1-216-174-00	RES-CHIP	100	5%	1/8W
R713	1-216-174-00	RES-CHIP	100	5%	1/8W
R714	1-216-296-00	SHORT	0		
R801	1-208-806-11	RES-CHIP	10K	2%	1/10W
R802	1-208-806-11	RES-CHIP	10K	2%	1/10W
R803	1-216-105-11	RES-CHIP	220K	5%	1/10W
R804	1-216-105-11	RES-CHIP	220K	5%	1/10W
R805	1-216-246-00	RES-CHIP	100K	5%	1/8W
R806	1-216-097-11	RES-CHIP	100K	5%	1/10W
R807	1-249-417-11	CARBON	1K	5%	1/4W
R808	1-249-417-11	CARBON	1K	5%	1/4W
R812	1-216-295-00	SHORT	0		
R813	1-247-863-11	CARBON	22K	5%	1/4W
R815	1-249-417-11	CARBON	1K	5%	1/4W
R816	1-216-025-11	RES-CHIP	100	5%	1/10W
R818	1-216-049-11	RES-CHIP	1K	5%	1/10W
R819	1-216-049-11	RES-CHIP	1K	5%	1/10W
R820	1-216-049-11	RES-CHIP	1K	5%	1/10W
R821	1-216-069-11	METAL CHIP	6.8K	5%	1/10W
R824	1-216-097-11	RES-CHIP	100K	5%	1/10W
R825	1-249-429-11	CARBON	10K	5%	1/4W
R826	1-216-025-11	RES-CHIP	100	5%	1/10W
R827	1-216-025-11	RES-CHIP	100	5%	1/10W
R829	1-247-807-11	CARBON	100	5%	1/4W
R830	1-247-807-11	CARBON	100	5%	1/4W
R831	1-216-073-00	METAL CHIP	10K	5%	1/10W
R832	1-216-073-00	METAL CHIP	10K	5%	1/10W
R833	1-216-049-11	RES-CHIP	1K	5%	1/10W
R834	1-216-049-11	RES-CHIP	1K	5%	1/10W
R837	1-216-049-11	RES-CHIP	1K	5%	1/10W
R838	1-216-049-11	RES-CHIP	1K	5%	1/10W
R839	1-216-025-11	RES-CHIP	100	5%	1/10W
R840	1-216-025-11	RES-CHIP	100	5%	1/10W
R841	1-216-049-11	RES-CHIP	1K	5%	1/10W
R843	1-216-295-00	SHORT	0		(4000X/4005)
R845	1-216-097-11	RES-CHIP	100K	5%	1/10W (4800X)
R846	1-216-089-11	RES-CHIP	47K	5%	1/10W (4800X)
R847	1-216-097-11	RES-CHIP	100K	5%	1/10W
R852	1-216-295-00	SHORT	0		
R854	1-216-295-00	SHORT	0		
R855	1-216-019-00	RES-CHIP	56	5%	1/10W
R901	1-216-246-00	RES-CHIP	100K	5%	1/8W
R902	1-216-049-11	RES-CHIP	1K	5%	1/10W
R903	1-216-027-00	METAL CHIP	120	5%	1/10W

MAIN **RELAY** **SERVO**

Ref. No.	Part No.	Description			Remark
R904	1-216-085-00	METAL CHIP	33K	5%	1/10W
R905	1-216-025-11	RES-CHIP	100	5%	1/10W
R907	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R909	1-216-044-00	METAL CHIP	620	5%	1/10W
R910	1-216-097-11	RES-CHIP	100K	5%	1/10W
R912	1-216-097-11	RES-CHIP	100K	5%	1/10W
R913	1-216-246-00	RES-CHIP	100K	5%	1/8W
R914	1-216-089-11	RES-CHIP	47K	5%	1/10W
R915	1-216-079-00	METAL CHIP	18K	5%	1/10W
R917	1-216-105-11	RES-CHIP	220K	5%	1/10W
R918	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R920	1-216-097-11	RES-CHIP	100K	5%	1/10W
R922	1-216-085-00	METAL CHIP	33K	5%	1/10W
R923	1-216-105-11	RES-CHIP	220K	5%	1/10W
R924	1-216-089-11	RES-CHIP	47K	5%	1/10W
R925	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R926	1-216-097-11	RES-CHIP	100K	5%	1/10W
R928	1-216-043-11	RES-CHIP	560	5%	1/10W
R929	1-216-043-11	RES-CHIP	560	5%	1/10W
R930	1-216-097-11	RES-CHIP	100K	5%	1/10W
R931	1-216-073-00	METAL CHIP	10K	5%	1/10W
R933	1-216-083-00	METAL CHIP	27K	5%	1/10W
R934	1-247-810-11	CARBON	130	5%	1/4W
R935	1-247-810-11	CARBON	130	5%	1/4W
R936	1-247-810-11	CARBON	130	5%	1/4W
R937	1-247-810-11	CARBON	130	5%	1/4W
R938	1-247-810-11	CARBON	130	5%	1/4W
R939	1-247-810-11	CARBON	130	5%	1/4W
R940	1-216-138-00	RES-CHIP	3.3	5%	1/8W
		< SWITCH >			
S900	1-762-638-11	SWITCH, TACTILE (RESET)			
S901	1-771-540-11	SWITCH, PUSH (1 KEY) (NOSE DET)			
SW802	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECT) (4800X)			
		< TUNER >			
TU601	A-3220-738-A	TUNER UNIT (TUX-020)			
		< VIBRATOR >			
X800	1-781-822-11	VIBRATOR, CERAMIC (18.432MHz)			
X801	1-567-098-41	VIBRATOR, CRYSTAL (32kHz)			
**********					
*	1-676-690-11	RELAY BOARD			
		**********			
		< CONNECTOR >			
CNP902	1-794-064-11	SOCKET, CONNECTOR 14P			
CNP903	1-792-173-11	CABLE, FLAT (FFC) 12P			
		< DIODE >			
LED905	8-719-033-14	LED CL-170PG-CD-T (CD WINDOW)			

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
LSW916	1-771-609-11	SWITCH, TACTILE (WITH LED) (⏏)			
		< RESISTOR >			
R930	1-216-037-00	METAL CHIP	330	5%	1/10W
**********					
*	A-3294-809-A	SERVO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C103	1-104-609-11	ELECT CHIP	100uF	20%	4V
C104	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C106	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C107	1-115-156-11	CERAMIC CHIP	1uF		10V
C108	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C109	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C111	1-104-852-11	TANTAL. CHIP	22uF	20%	10V
C115	1-164-733-11	CERAMIC CHIP	820PF	10%	50V
C116	1-165-128-11	CERAMIC CHIP	0.22uF		16V
C117	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C118	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C127	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C301	1-126-393-11	ELECT CHIP	33uF	20%	10V
C302	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C303	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C304	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C305	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C306	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C307	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C308	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C309	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C310	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C311	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C312	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C501	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C502	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C504	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C505	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C506	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C507	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C508	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C509	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C510	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C511	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C512	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C513	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C514	1-126-391-11	ELECT CHIP	47uF	20%	6.3V
C515	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C517	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C518	1-164-360-11	CERAMIC CHIP	0.1uF		16V

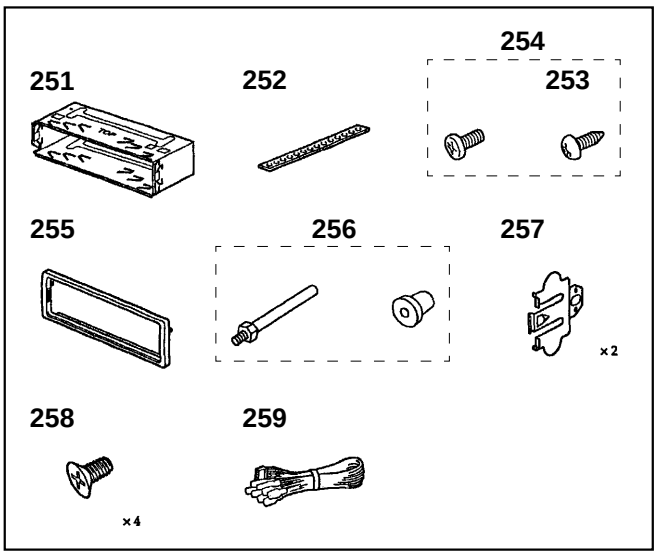
Ref. No.	Part No.	Description			Remark
C519	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C520	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C521	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C522	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C550	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C553	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C554	1-164-360-11	CERAMIC CHIP	0.1uF		16V
		< CONNECTOR >			
CN1	1-764-616-12	HOUSING, CONNECTOR (PC BOARD) 30P			
CN2	1-794-153-21	CONNECTOR, FPC (ZIF)16P			
CN3	1-770-347-21	CONNECTOR, FPC 6P			
		< FERRITE BEAD >			
FB101	1-216-295-00	SHORT	0		
FB102	1-216-295-00	SHORT	0		
FB103	1-216-295-00	SHORT	0		
FB501	1-216-295-00	SHORT	0		
FB503	1-500-445-21	FERRITE BEAD INDUCTOR			
		< IC >			
IC1	8-752-095-36	IC CXA2596M-T6			
IC5	8-752-914-87	IC CXP84640-072Q			
IC7	8-759-653-67	IC LA6556			
IC501	8-752-392-04	IC CXD2598Q			
		< JUMPER RESISTOR >			
JR501	1-216-295-00	SHORT	0		
JR505	1-216-864-11	METAL CHIP	0	5%	1/16W
JR506	1-216-864-11	METAL CHIP	0	5%	1/16W
JR507	1-216-295-00	SHORT	0		
		< TRANSISTOR >			
Q101	8-729-904-87	TRANSISTOR 2SB1197K-T-146-R			
		< RESISTOR >			
R101	1-216-847-11	METAL CHIP	150K	5%	1/16W
R102	1-216-847-11	METAL CHIP	150K	5%	1/16W
R103	1-216-158-00	RES-CHIP	22	5%	1/8W
R104	1-216-857-11	METAL CHIP	1M	5%	1/16W
R105	1-216-833-11	RES-CHIP	10K	5%	1/16W
R106	1-216-857-11	METAL CHIP	1M	5%	1/16W
R107	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R108	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R110	1-216-837-11	METAL CHIP	22K	5%	1/16W
R111	1-216-833-11	RES-CHIP	10K	5%	1/16W
R113	1-216-839-11	METAL CHIP	33K	5%	1/16W
R116	1-216-845-11	METAL CHIP	100K	5%	1/16W
R122	1-216-845-11	METAL CHIP	100K	5%	1/16W
R123	1-216-839-11	METAL CHIP	33K	5%	1/16W
R126	1-216-842-11	METAL CHIP	56K	5%	1/16W
R127	1-216-821-11	METAL CHIP	1K	5%	1/16W
R213	1-216-821-11	METAL CHIP	1K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R301	1-216-843-11	METAL CHIP	68K	5%	1/16W
R302	1-216-839-11	METAL CHIP	33K	5%	1/16W
R303	1-216-821-11	METAL CHIP	1K	5%	1/16W
R304	1-216-839-11	METAL CHIP	33K	5%	1/16W
R306	1-216-833-11	RES-CHIP	10K	5%	1/16W
R307	1-216-833-11	RES-CHIP	10K	5%	1/16W
R308	1-216-833-11	RES-CHIP	10K	5%	1/16W
R309	1-216-833-11	RES-CHIP	10K	5%	1/16W
R310	1-216-833-11	RES-CHIP	10K	5%	1/16W
R311	1-216-833-11	RES-CHIP	10K	5%	1/16W
R312	1-216-845-11	METAL CHIP	100K	5%	1/16W
R313	1-216-842-11	METAL CHIP	56K	5%	1/16W
R314	1-216-842-11	METAL CHIP	56K	5%	1/16W
R315	1-216-842-11	METAL CHIP	56K	5%	1/16W
R316	1-216-842-11	METAL CHIP	56K	5%	1/16W
R317	1-216-838-11	METAL CHIP	27K	5%	1/16W
R318	1-216-842-11	METAL CHIP	56K	5%	1/16W
R319	1-216-842-11	METAL CHIP	56K	5%	1/16W
R321	1-216-846-11	METAL CHIP	120K	5%	1/16W
R322	1-216-835-11	METAL CHIP	15K	5%	1/16W
R501	1-216-833-11	RES-CHIP	10K	5%	1/16W
R503	1-216-845-11	METAL CHIP	100K	5%	1/16W
R504	1-216-857-11	METAL CHIP	1M	5%	1/16W
R505	1-216-839-11	METAL CHIP	33K	5%	1/16W
R506	1-216-845-11	METAL CHIP	100K	5%	1/16W
R507	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R511	1-216-845-11	METAL CHIP	100K	5%	1/16W
R513	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R516	1-216-845-11	METAL CHIP	100K	5%	1/16W
R517	1-216-837-11	METAL CHIP	22K	5%	1/16W
R518	1-216-834-11	METAL CHIP	12K	5%	1/16W
R519	1-216-834-11	METAL CHIP	12K	5%	1/16W
R520	1-216-834-11	METAL CHIP	12K	5%	1/16W
R521	1-216-834-11	METAL CHIP	12K	5%	1/16W
R522	1-216-834-11	METAL CHIP	12K	5%	1/16W
R523	1-216-834-11	METAL CHIP	12K	5%	1/16W
R524	1-216-845-11	METAL CHIP	100K	5%	1/16W
R526	1-216-845-11	METAL CHIP	100K	5%	1/16W
R527	1-216-845-11	METAL CHIP	100K	5%	1/16W
R531	1-216-809-11	METAL CHIP	100	5%	1/16W
R532	1-216-845-11	METAL CHIP	100K	5%	1/16W
R533	1-216-845-11	METAL CHIP	100K	5%	1/16W
R535	1-216-845-11	METAL CHIP	100K	5%	1/16W
R551	1-216-841-11	METAL CHIP	47K	5%	1/16W
R552	1-216-841-11	METAL CHIP	47K	5%	1/16W
R553	1-216-845-11	METAL CHIP	100K	5%	1/16W
R554	1-216-845-11	METAL CHIP	100K	5%	1/16W
R555	1-216-845-11	METAL CHIP	100K	5%	1/16W
R558	1-216-864-11	METAL CHIP	0	5%	1/16W
R560	1-216-809-11	METAL CHIP	100	5%	1/16W
R563	1-216-809-11	METAL CHIP	100	5%	1/16W
R564	1-216-845-11	METAL CHIP	100K	5%	1/16W
R568	1-216-837-11	METAL CHIP	22K	5%	1/16W

SERVO

Ref. No.	Part No.	Description			Remark
R569	1-216-809-11	METAL CHIP	100	5%	1/16W
R570	1-216-821-11	METAL CHIP	1K	5%	1/16W
R572	1-216-809-11	METAL CHIP	100	5%	1/16W
R590	1-216-845-11	METAL CHIP	100K	5%	1/16W
R594	1-216-845-11	METAL CHIP	100K	5%	1/16W
R595	1-216-845-11	METAL CHIP	100K	5%	1/16W
R599	1-216-821-11	METAL CHIP	1K	5%	1/16W
		< SWITCH >			
SW1	1-762-944-12	SWITCH, DETECTION (SMALL TYPE) (DOWN)			
		< VIBRATOR >			
X1	1-781-758-21	VIBRATOR, CERAMIC (CHIP TYPE) (10MHz)			
X2	1-781-759-21	VIBRATOR, CERAMIC (CHIP TYPE) (16MHz)			
**********					
		MISCELLANEOUS			
		**********			
9	1-792-194-21	CORD (WITH CONNECTOR) (POWER)			
* 201	X-3378-480-1	CHASSIS (OP) ASSY (INCLUDING M901)			
206	1-676-707-11	PICK-UP FLEXIBLE BOARD			
207	1-677-182-11	MOTOR FLEXIBLE BOARD			
⚠210	8-820-103-03	PICK-UP, OPTICAL KSS-720A/K1RP			
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)			
M903	A-3301-978-A	MOTOR SUB ASSY, LO (LOADING)			
**********					
		ACCESSORIES & PACKING MATERIALS			
		**********			
	3-043-291-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (4000X/4005)			
	3-043-292-11	MANUAL, INSTRUCTION (ENGLISH) (4000X/4005)			
	3-043-292-21	MANUAL, INSTRUCTION (FRENCH) (CND)			
	3-044-884-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH,TRADITIONAL CHINESE) (4800X)			
	3-044-885-11	MANUAL, INSTRUCTION (ENGLISH,SPANISH, TRADITIONAL CHINESE) (4800X)			
	X-3378-390-1	CASE ASSY (for FRONT PANEL)			
**********					

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#2	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#3	7-685-795-09	SCREW +PTT 2.6X12 (S)	
#4	7-685-106-19	SCREW +P 2X10 TYPE 2 NON-SLIT	
#5	7-621-772-20	SCREW +B 2X5	
#6	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	
#7	7-628-253-00	SCREW +PS 2X4	
#8	7-627-553-37	SCREW, PRECISION +P 2X3 TYPE 3	
#9	7-627-553-17	SCREW, PRECISION +P 2X2 TYPE 3	
#10	7-627-850-28	SCREW, PRECISION +P 1.4X3	
**********			
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
251	3-014-370-21	FRAME, FITTING	
252	3-916-012-01	BRACKET (ND), FITTING ASSIST	(4000X/4005)
253	7-682-160-01	SCREW +P 4X6 (4000X/4005)	
254	X-3368-725-1	SCREW ASSY, FITTING (4000X/4005)	
255	3-041-027-01	COLLAR	
256	X-3366-405-1	SCREW ASSY (EXP), FITTING (4800X)	
257	3-030-929-02	SPRING, FITTING	
258	3-934-325-01	SCREW (+K 5X8 TP)	
259	1-792-194-21	CORD (WITH CONNECTOR) (POWER)	



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Sony Corporation
Mobile Electronics Division Company

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